

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: August 29, 2001, 09:46:24 ; Search time 21.49 Seconds  
(without alignments)  
383.660 Million cell updates/sec

Title: US-09-457-066-2\_COPY\_210\_345

Perfect score: 754

Sequence: 1 LQLEDYRPTWQLLGRKAFV.....DVALEHHECDVCVRGSGTG 136

Scoring table:

BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 412676 seqs, 60623988 residues

Total number of hits satisfying chosen parameters: 412676

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 10%

Listing first 45 summaries

Database :

A\_Geneseq\_0601.\*

- 1: /SIDS8/gcgdata/geneseq/geneseq/AA1980.DAT.\*
- 2: /SIDS8/gcgdata/geneseq/geneseq/AA1981.DAT.\*
- 3: /SIDS8/gcgdata/geneseq/geneseq/AA1982.DAT.\*
- 4: /SIDS8/gcgdata/geneseq/geneseq/AA1983.DAT.\*
- 5: /SIDS8/gcgdata/geneseq/geneseq/AA1984.DAT.\*
- 6: /SIDS8/gcgdata/geneseq/geneseq/AA1985.DAT.\*
- 7: /SIDS8/gcgdata/geneseq/geneseq/AA1986.DAT.\*
- 8: /SIDS8/gcgdata/geneseq/geneseq/AA1987.DAT.\*
- 9: /SIDS8/gcgdata/geneseq/geneseq/AA1988.DAT.\*
- 10: /SIDS8/gcgdata/geneseq/geneseq/AA1989.DAT.\*
- 11: /SIDS8/gcgdata/geneseq/geneseq/AA1990.DAT.\*
- 12: /SIDS8/gcgdata/geneseq/geneseq/AA1991.DAT.\*
- 13: /SIDS8/gcgdata/geneseq/geneseq/AA1992.DAT.\*
- 14: /SIDS8/gcgdata/geneseq/geneseq/AA1993.DAT.\*
- 15: /SIDS8/gcgdata/geneseq/geneseq/AA1994.DAT.\*
- 16: /SIDS8/gcgdata/geneseq/geneseq/AA1995.DAT.\*
- 17: /SIDS8/gcgdata/geneseq/geneseq/AA1996.DAT.\*
- 18: /SIDS8/gcgdata/geneseq/geneseq/AA1997.DAT.\*
- 19: /SIDS8/gcgdata/geneseq/geneseq/AA1998.DAT.\*
- 20: /SIDS8/gcgdata/geneseq/geneseq/AA1999.DAT.\*
- 21: /SIDS8/gcgdata/geneseq/geneseq/AA2000.DAT.\*
- 22: /SIDS8/gcgdata/geneseq/geneseq/AA2001.DAT.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	754	100.0	318	21	AA1984558
2	754	100.0	339	21	AA1984558
3	754	100.0	345	20	AA1984558
4	754	100.0	345	20	AA1984558
5	754	100.0	345	20	AA1984558
6	754	100.0	345	21	AA1984558
7	754	100.0	345	21	AA1984558
8	754	100.0	345	21	AA1984558
9	754	100.0	345	21	AA1984558
10	754	100.0	345	21	AA1984558
11	754	100.0	345	21	AA1984558

12	754	100.0	345	21	AA1984558
13	754	100.0	345	21	AA1984558
14	754	100.0	345	21	AA1984558
15	754	100.0	345	21	AA1984558
16	754	100.0	345	21	AA1984558
17	754	100.0	345	21	AA1984558
18	754	100.0	345	21	AA1984558
19	754	100.0	345	21	AA1984558
20	754	100.0	345	21	AA1984558
21	754	100.0	345	21	AA1984558
22	754	100.0	345	21	AA1984558
23	754	100.0	345	21	AA1984558
24	754	100.0	345	21	AA1984558
25	754	100.0	345	21	AA1984558
26	754	100.0	345	21	AA1984558
27	754	100.0	345	21	AA1984558
28	754	100.0	345	21	AA1984558
29	754	100.0	345	21	AA1984558
30	754	100.0	345	21	AA1984558
31	754	100.0	345	21	AA1984558
32	754	100.0	345	21	AA1984558
33	754	100.0	345	21	AA1984558
34	754	100.0	345	21	AA1984558
35	754	100.0	345	21	AA1984558
36	754	100.0	345	21	AA1984558
37	754	100.0	345	21	AA1984558
38	754	100.0	345	21	AA1984558
39	754	100.0	345	21	AA1984558
40	754	100.0	345	21	AA1984558
41	754	100.0	345	21	AA1984558
42	754	100.0	345	21	AA1984558
43	754	100.0	345	21	AA1984558
44	754	100.0	345	21	AA1984558
45	754	100.0	345	21	AA1984558

#### ALIGNMENTS

RESULT 1

AA1984558

ID AA1984558 standard; Protein: 318 AA.

AC

AA1984558;

DT 25-JUL-2000 (first entry)

DE A fragment of platelet-derived growth factor C (PDGF-C).

EW platelet-derived growth factor C; PDGF-C; cell proliferation;

KW growth factor; heparin; connective tissue; wound healing; VEGF-F;

KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;

KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;

KW lung carcinoma; erythroleukemia; tissue remodelling.

OS Homo sapiens.

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XX (LUDW-) LUDWIG INST CANCER RES.  
 PA (UYHE-) UNIV HELSINKI LICENSING LTD.  
 XX Eriksson U, Aase K, Lee X, Ponten A, Uutela M, Alitalo K;  
 PI Oestman A, Heldin C, Betsholz C;  
 XX WPI: 2000-292954/25.  
 DR N-PSDB; AAL12524.  
 XX Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,  
 PT differentiation, growth and motility of cells expressing the PDGF-C  
 PT receptor  
 XX  
 PS Disclosure: Fig 4; 135pp: English.  
 XX The present sequence represents a human platelet-derived growth factor C  
 CC (PDGF-C) (formally designated VEGF-F) fragment. PDGF-C polypeptides have  
 CC the ability to stimulate and enhance proliferation or differentiation,  
 CC and/or growth or motility of cells expressing a PDGF-C receptor.  
 CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell  
 CC proliferation, preferably in combination with one other growth factor  
 CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also  
 CC be used for stimulating connective tissue or wound healing. The  
 CC PDGF-C polypeptide can be enzymatically processed to generate the active  
 CC truncated form of PDGF-C and used to regulate the receptor-binding  
 CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast  
 CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.  
 CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour  
 CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.  
 CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma  
 CC and erythroleukemia, can be identified by testing for expression of  
 CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue  
 CC remodelling during invasion of tumour cells into a normal population of  
 CC cells. Antagonists can also be used to treat fibrotic conditions,  
 CC especially found in the lung, kidney or liver.  
 XX  
 SQ Sequence 318 AA;  
 Query Match 100.0%; Score 754; DB 21; Length 318;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTTEEVRLYSCTPRNFSVIREELKRTDTI 60  
 DB 183 ldledlyrptwqllgkafvgrksrvdnlntteevrlyscprnfsvireelkrtdti 242  
 QY 61 FWPGCLLVKRCGGNCACCLHNCNECQVPSKVKYKHYEVLQLRPKTGVRGLHKSITDVAL 120  
 DB 243 fwpgccllvkrcggncacclhncnecqvpksvkkyhevlqlrpkgtvrglhksitdval 302  
 QY 121 EHHEECDCVCRGSTGG 136  
 DB 303 ehheecdvcvrgstgg 318  
 RESULT 2  
 AAB58438  
 ID AAB58438 standard; Protein: 339 AA.  
 XX AAB58438;  
 AC AAB58438;  
 XX 14-MAR-2001 (first entry)  
 DT Lung cancer associated polypeptide sequence SEQ ID 776.  
 DE Human; lung cancer associated protein; neuroprotective; cytostatic;  
 XX cardioactive; immunomodulatory; muscular active; vulnerary;  
 KW gastrointestinal; nephrotropic; antiinfective; gynecological;  
 KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;  
 KW proliferative disorder; wound healing; infectious disease.  
 XX

OS Homo sapiens.  
 XX WO200055180-A2.  
 PN 21-SEP-2000.  
 XX 08-MAR-2000; 2000WO-US05918.  
 PF 12-MAR-1999; 99US-0124270.  
 PR (HUMA-) HUMAN GENOME SCI INC.  
 PA (ROSE/) ROSEN C A.  
 XX Ruben SM;  
 PI WPI: 2000-587514/55.  
 XX N-PSDB; AAF18314.  
 DR Lung cancer associated gene sequences, referred to as lung cancer  
 CC PT antigens, useful for treatment, prevention, and diagnosis of disorders  
 CC PT such as lung cancer  
 XX  
 PS Claim 11; Page 1305-1306; 1425pp; English.  
 XX Polynucleotide sequences AAF1982 - AAF18424 encode human lung cancer  
 CC associated proteins represented in AAB58106 - AAB58548. Lung cancer  
 CC associated proteins and polynucleotide sequences, their agonists, and  
 CC antagonists may have neuroprotective; cytostatic; cardioactive;  
 CC immunomodulatory; muscular active general; vulnerary; gastrointestinal  
 CC general; nephrotropic; antiinfective; gynecological; or antibacterial  
 CC activity. The invention also includes antibodies specific for the  
 CC protein or polynucleotide sequences. The lung cancer associated  
 CC polynucleotide sequences may be used for detection of lung cancer,  
 CC chromosome identification, as chromosome markers, and for numerous other  
 CC diagnostic or research purposes. The proteins may be used to treat  
 CC disorders such as neural, immune, muscular, reproductive,  
 CC gastrointestinal, pulmonary, cardiovascular, renal, and proliferative  
 CC disorders. The proteins may also be used in the treatment of wounds and  
 CC infectious diseases. Polynucleotide sequences AAF18425 - AAF18433 and  
 CC peptide AAB58549 are used in the course of the invention for the  
 CC identification and characterisation of the polynucleotide and protein  
 CC sequences.  
 XX  
 SQ Sequence 339 AA;  
 Query Match 100.0%; Score 754; DB 21; Length 339;  
 Best Local Similarity 100.0%; Pred. No. 4.6e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTTEEVRLYSCTPRNFSVIREELKRTDTI 60  
 DB 204 ldledlyrptwqllgkafvgrksrvdnlntteevrlyscprnfsvireelkrtdti 263  
 QY 61 FWPGCLLVKRCGGNCACCLHNCNECQVPSKVKYKHYEVLQLRPKTGVRGLHKSITDVAL 120  
 DB 264 fwpgccllvkrcggncacclhncnecqvpksvkkyhevlqlrpkgtvrglhksitdval 323  
 QY 121 EHHEECDCVCRGSTGG 136  
 DB 324 ehheecdvcvrgstgg 339  
 RESULT 3  
 AAY33679  
 ID AAY33679 standard; Protein: 345 AA.  
 XX AAY33679;  
 AC AAY33679;  
 XX 11-JAN-2000 (first entry)  
 DT Human VEGF-E protein.  
 XX

KW VEGF-E; human; vascular endothelial cell growth factor; wound repair;  
 KW treatment; cardiovascular disorder; endothelial disorder; therapy;  
 KW tissue generation; regeneration; cardiac hypertrophy; cancer; detection;  
 KW angiogenic disorder; age-related macular degeneration; vascular disease;  
 KW neovascularization; tumor; gene mapping.

XX Homo sapiens.

XX WO9947677-A2.

XX 23-SEP-1999.

XX 10-MAR-1999; 99WO-US05190.

XX 17-MAR-1998; 98US-0040220.

XX 02-NOV-1998; 98US-0184216.

XX (GETH ) GENENTECH INC.

XX Ferrara N, Kuo SS;

XX WPI; 1999-580306/49.

XX N-PSDB; AAZ23691.

XX New growth factor polypeptide useful for treating cardiovascular or  
 PT endothelial disorders, e.g. cardiac hypertrophy

XX Claim 1; Fig 2; 122pp; English.

XX This invention describes the isolation of a novel human vascular  
 CC endothelial cell growth factor-E (VEGF-E) polypeptide which has  
 CC tranquilizer, vulnery and cardiant activity. VEGF-E can be administered  
 CC therapeutically, especially by expressing encoding polynucleotides, to  
 CC treat cardiovascular or endothelial disorders in mammals, especially  
 CC humans. It is useful in wound repair and tissue generation and  
 CC regeneration, and may especially be used to treat cardiac hypertrophy  
 CC It can be combined with a carrier in pharmaceutical compositions, which  
 CC can be administered to treat disorders as above. VEGF-E can be used to  
 CC screen for antagonists and agonists, and the antagonists administered to  
 CC treat angiogenic disorders in mammals (especially humans) e.g. cancer or  
 CC age-related macular degeneration. It can be used to generate antibodies,  
 CC useful therapeutically as antagonists, as above. The antibodies are also  
 CC useful to detect VEGF-E polypeptide, especially to diagnose  
 CC cardiovascular, endothelial or angiogenic disorders in mammals (e.g.  
 CC by contacting the antibody with a tissue sample and detecting formation  
 CC of an antibody-VEGF-E polypeptide complex. Polynucleotides encoding  
 CC VEGF-E can be used to diagnose cardiovascular and endothelial disorders  
 CC in mammals, by detecting abnormally high or low VEGF-E gene expression in  
 CC tissue samples. They can also be used to diagnose a disease or  
 CC susceptibility to a disease related to a mutated form of VEGF-E (e.g. a  
 CC cardiovascular, endothelial or angiogenic disorder such as a tumor), by  
 CC detecting a mutation in the VEGF-E-encoding sequence isolated from a  
 CC sample. They may also be used to produce probes useful to detect related  
 CC sequences or for gene mapping. This sequence represents the human VEGF-E  
 CC protein described in the method of the invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 754; DB 20; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWOLGKAFVFGKSRVVDNLNLTTEVRLYSCTPRNFSYIREELKRTDTI 60

Db 210 ldledlyrptwqlgkafvfgkrrvvdnlnteervlyscprnfsyireelkrttdti 269

QY 61 FWPCCLLVKRCGGNACCLHNCNECQVPSKVTKYHEVLQLRPTGVRGLHKSITDVAL 120

Db 270 fwpccllvkrcggncacclhncnecqvpkskkyhevlqlrptgvrghlksitdval 329

QY 121 EHHEECDCVCRSGTGG 136

Db	330	ehheecdvcvrgstgg	345
RESULT	4		
AA41766			
ID	AA41766	standard; Protein; 345 AA.	
XX	AC	AA41766;	
XX	DT	07-DEC-1999 (first entry)	
XX	DE	Human PRO200 protein sequence.	
XX	KW	Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation;	
XX	KW	probe; blood coagulation disorder; cancer; cellular adhesion disorder;	
XX	KW	secreted protein; transmembrane protein.	
XX	OS	Homo sapiens.	
XX	PN	WO9946281-A2.	
XX	PD	16-SEP-1999.	
XX	PF	08-MAR-1999; 99WO-US05028.	
XX	PR	10-MAR-1998; 98US-0077450.	
XX	PR	11-MAR-1998; 98US-0077632.	
XX	PR	11-MAR-1998; 98US-0077641.	
XX	PR	12-MAR-1998; 98US-0077649.	
XX	PR	13-MAR-1998; 98US-0077791.	
XX	PR	17-MAR-1998; 98US-0078004.	
XX	PR	20-MAR-1998; 98US-0040220.	
XX	PR	20-MAR-1998; 98US-0078886.	
XX	PR	20-MAR-1998; 98US-0078910.	
XX	PR	20-MAR-1998; 98US-0078936.	
XX	PR	25-MAR-1998; 98US-0079294.	
XX	PR	26-MAR-1998; 98US-0079656.	
XX	PR	27-MAR-1998; 98US-0079663.	
XX	PR	27-MAR-1998; 98US-0079664.	
XX	PR	27-MAR-1998; 98US-0079728.	
XX	PR	27-MAR-1998; 98US-0079786.	
XX	PR	30-MAR-1998; 98US-0079920.	
XX	PR	31-MAR-1998; 98US-0080105.	
XX	PR	31-MAR-1998; 98US-0080107.	
XX	PR	31-MAR-1998; 98US-0080165.	
XX	PR	31-MAR-1998; 98US-0080194.	
XX	PR	01-APR-1998; 98US-0080327.	
XX	PR	01-APR-1998; 98US-0080328.	
XX	PR	01-APR-1998; 98US-0080333.	
XX	PR	01-APR-1998; 98US-0080334.	
XX	PR	08-APR-1998; 98US-0081049.	
XX	PR	08-APR-1998; 98US-0081070.	
XX	PR	08-APR-1998; 98US-0081071.	
XX	PR	09-APR-1998; 98US-0081195.	
XX	PR	09-APR-1998; 98US-0081203.	
XX	PR	09-APR-1998; 98US-0081229.	
XX	PR	15-APR-1998; 98US-0081817.	
XX	PR	15-APR-1998; 98US-0081838.	
XX	PR	15-APR-1998; 98US-0081952.	
XX	PR	15-APR-1998; 98US-0081955.	
XX	PR	21-APR-1998; 98US-0082569.	
XX	PR	21-APR-1998; 98US-0082568.	
XX	PR	22-APR-1998; 98US-0082700.	
XX	PR	22-APR-1998; 98US-0082704.	
XX	PR	22-APR-1998; 98US-0082804.	
XX	PR	23-APR-1998; 98US-0082767.	
XX	PR	23-APR-1998; 98US-0082796.	
XX	PR	27-APR-1998; 98US-0083336.	
XX	PR	28-APR-1998; 98US-0083322.	

PR 29-APR-1998; 98US-0083392.  
 PR 29-APR-1998; 98US-0083495.  
 PR 29-APR-1998; 98US-0083496.  
 PR 29-APR-1998; 98US-0083499.  
 PR 29-APR-1998; 98US-0083500.  
 PR 29-APR-1998; 98US-0083545.  
 PR 29-APR-1998; 98US-0083554.  
 PR 29-APR-1998; 98US-0083558.  
 PR 29-APR-1998; 98US-0083559.  
 PR 30-APR-1998; 98US-0083742.  
 PR 05-MAY-1998; 98US-0084366.  
 PR 06-MAY-1998; 98US-0084414.  
 PR 06-MAY-1998; 98US-0084441.  
 PR 07-MAY-1998; 98US-0084598.  
 PR 07-MAY-1998; 98US-0084600.  
 PR 07-MAY-1998; 98US-0084627.  
 PR 07-MAY-1998; 98US-0084637.  
 PR 07-MAY-1998; 98US-0084639.  
 PR 07-MAY-1998; 98US-0084640.  
 PR 07-MAY-1998; 98US-0084643.  
 PR 13-MAY-1998; 98US-0085323.  
 PR 13-MAY-1998; 98US-0085338.  
 PR 13-MAY-1998; 98US-0085339.  
 PR 15-MAY-1998; 98US-0085573.  
 PR 15-MAY-1998; 98US-0085579.  
 PR 15-MAY-1998; 98US-0085580.  
 PR 15-MAY-1998; 98US-0085582.  
 PR 15-MAY-1998; 98US-0085689.  
 PR 15-MAY-1998; 98US-0085697.  
 PR 15-MAY-1998; 98US-0085700.  
 PR 15-MAY-1998; 98US-0085704.  
 PR 18-MAY-1998; 98US-0086023.  
 PR 22-MAY-1998; 98US-0086392.  
 PR 22-MAY-1998; 98US-0086414.  
 PR 22-MAY-1998; 98US-0086430.  
 PR 22-MAY-1998; 98US-0086480.  
 PR 28-MAY-1998; 98US-0087090.  
 PR 28-MAY-1998; 98US-0087106.  
 PR 28-MAY-1998; 98US-0087208.  
 PR 30-JUL-1998; 98US-0094651.  
 PR 11-SEP-1998; 98US-0100038.  
 XX (GETH ) GENENTECH INC.

PA Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;

XX WPI: 1999-551358/46.  
 XX N-PSDB; AAZ34296.

DR New secreted and transmembrane polypeptides and their polynucleotides,  
 DR useful for treating blood coagulation disorders, cancers and cellular  
 DR adhesion disorders -

XX Claim 12; Fig 207; 530pp; English.

XX The present invention describes secreted and transmembrane polypeptides  
 CC and their polynucleotides. The nucleotide sequences are useful as  
 CC sources of probes, primers, for chromosome mapping, and for generation  
 CC of antisense sequences. They can also be used to create transgenic  
 CC animals. The proteins can be used to treat a variety of diseases and  
 CC disorders, depending on their function. Diseases that may be treated  
 CC include blood coagulation disorders, cancers and cellular adhesion  
 CC disorders. They may also be used to raise antibodies. AAZ33891 to  
 CC AAZ34338, and AA41685 to AA41774 represent polynucleotide and  
 CC polypeptide sequence given in the exemplification of the present  
 CC invention.

XX Sequence 345 AA;

XX Query Match 100.0%; Score 754; DB 20; Length 345;  
 XX Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 XX Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDLNLTEEVRLYSCTPRNFSVSIREELKRTDTI 60  
 Db 210 ldledlyrptwqllgkafvgrksrvvdlnlteevrlyscprnfsvsireelkrtddt 269  
 QY 61 FWPGCCLLVKRCGGNCACCLHNCNECCQCVPSKVTKKHYEVQLQRPKTCVGRGLHSLDVAL 120  
 Db 270 fwpgccllvkrccgncacclhncnecgcpskvtkkhyevlqlrpkctgvrghksltdval 329  
 QY 121 EHHEECDCVCRGSTGG 136  
 Db 330 ehheecdvcrgstgg 345

# RESULT 5

AA30023

ID AAY30023 standard; Protein; 345 AA.

XX AC AAY30023;

XX DT 11-OCT-1999 (first entry)

XX DE Human vascular endothelial growth factor related protein.

XX KW Vascular endothelial growth factor related protein; VEGF-R protein;  
 KW tissue growth inhibition; tumour growth; cancer; tissue growth;  
 KW angiogenesis; coronary artery blockage.

XX OS Homo sapiens.

XX PN WO9937671-A1.

XX PD -29-JUL-1999.

XX PF 26-JAN-1999; 99WO-US01574.

XX PR 31-AUG-1998; 98US-0098548.

XX PR 27-JAN-1998; 98US-0072635.

XX PR 05-JUN-1998; 98US-0088089.

XX PR 24-JUN-1998; 98US-0090544.

XX PA (ELIL ) LILLY & CO ELI.

XX PI Dou S, Na S, Song HY;

XX DR WPI: 1999-458680/38.

XX DR N-PSDB; AAX86352.

XX PT A vascular endothelial growth factor related protein and related  
 PT polynucleotide, useful for identifying antagonists and binding  
 PT compounds

XX PS Claim 1; Page 56-58; 62pp; English.

XX CC The present sequence represents a vascular endothelial growth factor  
 CC related (VEGF-R) protein. VEGF-R can be used in assays to identify  
 CC compounds that bind to it or that antagonize its activity. VEGF-R  
 CC antagonists (e.g. anti-VEGF-R antibodies) are useful for inhibiting  
 CC tissue growth. This is useful for inhibiting tumour growth and for  
 CC treating cancer. VEGF-R itself can be used to stimulate tissue  
 CC growth, angiogenesis and to treat coronary artery blockage. The  
 CC VEGF-R coding sequence can be used for the recombinant production of  
 CC the VEGF-R protein.

XX SQ Sequence 345 AA;

XX Query Match 100.0%; Score 754; DB 20; Length 345;

XX Best Local Similarity 100.0%; Pred. No. 4.7e-71;

XX Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDLNLTEEVRLYSCTPRNFSVSIREELKRTDTI 60  
 Db 210 ldledlyrptwqllgkafvgrksrvvdlnlteevrlyscprnfsvsireelkrtddt 269

Db 210 ldledlyrptwlllgkafvgrksrvvdlntlteevrlyscprnfsvsireelkrtdti 269  
QY 61 FWPGLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTGVRGLHKSITDVAL 120  
|||||  
Db 270 fwpGCLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTGVRGLHKSITDVAL 329  
|||||  
QY 121 EHHEECDCVCRGSGTG 136  
|||||  
Db 330 ehheecdcvcrgstg 345  
|||||

RESULT 6  
AAB48657  
ID AAB48657 standard; Protein: 345 AA.  
XX AAB48657;  
XX 09-MAR-2001 (first entry)  
XX Human zvegfg3, SEQ ID NO:33.  
XX Human; zvegfg3; zvegfg4 fusion; growth factor homologue; VEGF/PDGF family;  
KW CUB domain; PDGF-like activity; mitogenic; osteogenic;  
KW neovascularisation; tissue repair; proliferation; differentiation;  
KW liver damage; neuroregenerative; Alzheimer's disease; multiple sclerosis;  
KW periodontal disease; bone fracture; wound healing; vulnary; ischaemia;  
KW immunomodulation; hepatic.  
XX Homo sapiens.  
XX W0200066736-A1.  
XX 09-NOV-2000.  
XX 03-MAY-2000; 2000WO-US40047.  
XX 03-MAY-1999; 99US-0304216.  
PR 10-NOV-1999; 99US-016463.  
PR 04-FEB-2000; 2000US-0180169.  
XX (ZYMO ) ZYMOGENETICS INC.  
XX Gilbert T, Hart CE, Sheppard PO, Gilbertson DG;  
XX WPI; 2000-687541/67.  
XX N-PSDB; AAC81582.  
XX Growth factor homologs and the nucleic acids that encode them, useful  
PT e.g. for treating liver damage, ischemia, multiple sclerosis and  
PT Alzheimer's disease -  
XX Claim 48; Page 125-126; 143pp; English.

CC The invention relates to the human growth factor homologue zvegfg4  
CC (AAB48653), and nucleic acids encoding it (AAC81555). zvegfg4 is a member  
CC of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial  
CC growth factor) family. zvegfg4 has a growth factor domain (AAB48654)  
CC characterised by a PDGF cysteine knot structure, and a CUB domain  
CC (AAB48655) which has a beta barrel structure. zvegfg4 has PDGF-like  
CC activity, having mitogenic activity on fibroblasts, vascular smooth  
CC muscle cells and pericytes, and has also been shown to stimulate bone  
CC growth. The invention also relates to fusion proteins comprising human  
CC zvegfg4 or fragments thereof, particularly human zvegfg4/human zvegfg3  
CC fusions; expression constructs and host cells comprising human zvegfg4  
CC nucleic acids; the recombinant expression of human zvegfg4; an antibody  
CC which binds to human zvegfg4 or a fragment thereof; a method of activating  
CC a cell-surface PDGF receptor using a zvegfg4-derived polypeptide; a  
CC method of modulating the proliferation, differentiation, migration or  
CC metabolism of bone cells, comprising exposing bone cells to  
CC zvegfg4-derived polypeptides; and a method of detecting a genetic  
CC abnormality in the zvegfg4 gene of a patient. zvegfg4 proteins and derived  
CC fragments may be used to stimulate tissue development or repair, or  
CC cellular differentiation or proliferation. They are particularly used for

CC the treatment or repair of liver damage, and may also be used to  
CC modulate neurite growth (e.g., in the treatment of Alzheimer's disease or  
CC multiple sclerosis). Due to their osteogenic activity, they may be used  
CC in the treatment of periodontal disease and fractures. They may also be  
CC used to enhance expansion and mobilisation of haematopoietic stem cells  
CC and endothelial precursor stem cells, which may be useful in the  
CC treatment of ischaemia, in wound healing, and in the modulation of the  
CC immune system. The present sequence represents human zvegfg3.  
XX  
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;  
Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWLLGKAFVGRKSRVVDLNTLLEEVRLYSCPRNFSVSIREELKRDTI 60  
|||||  
Db 210 ldledlyrptwlllgkafvgrksrvvdlntlteevrlyscprnfsvsireelkrtdti 269  
|||||  
QY 61 FWPGLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTGVRGLHKSITDVAL 120  
|||||  
Db 270 fwpGCLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTGVRGLHKSITDVAL 329  
|||||  
QY 121 EHHEECDCVCRGSGTG 136  
|||||  
Db 330 ehheecdcvcrgstg 345  
|||||

RESULT 7  
AAB24250  
ID AAB24250 standard; Protein: 345 AA.  
XX AAB24250;  
XX 08-FEB-2001 (first entry)  
XX Human platelet-derived growth factor related protein LP8.  
XX Human; platelet derived growth factor related protein; LP8; VEGFh;  
KW vascular endothelial growth factor h; tissue regeneration; vulnary;  
KW atherosclerosis; PDGF-related protein; antiarteriosclerotic.  
XX Homo sapiens.  
XX W0200059940-A2.  
XX 12-OCT-2000.  
XX 24-MAR-2000; 2000WO-US06427.  
XX 06-APR-1999; 99US-0127913.  
XX (ELIL ) LILLY & CO ELI.  
XX Hammond LJ, Na S;  
XX WPI; 2000-664991/64.  
DR N-PSDB; AAC64426.  
XX Enhancing tissue growth and promoting wound healing by administering  
PT platelet-derived growth factor related protein, LP8 or its analog and  
PT treating atherosclerosis by administering LP8 antagonist -  
XX Claim 4; Page 63-64; 64pp; English.  
XX The present invention describes a method for enhancing tissue growth,  
CC promoting wound healing or stimulating smooth muscle growth by  
CC administering a platelet-derived growth factor (PDGF) related protein,  
CC designated LP8 or its analogue. Also described is a method of slowing  
CC the progress of atherosclerosis or treating atherosclerosis comprising  
CC the administration of an LP8 antagonist. The method is useful for  
CC enhancing tissue growth, promoting wound healing and stimulating smooth

CC muscle growth. Antagonists of LP8 are useful for treating  
 CC atherosclerosis. The present sequence represents human LP8, which is  
 CC also called VEGFh.

XX Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;

Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLGKAFVGRKSRVVDNLNLTTEVRLYSCTPRNFSVSTREELKRTDTI 60  
 DB 210 ldledlyrptwqlgkafvgrksrvvdnlnteervrlyscprnfsvireelkrtdtl 269  
 QY 61 FWPGLLVKRCGGNCACCLHNCNECCVPSKVKTKYHEVLQLRPKTGVRGLHKS LTDVAL 120  
 DB 270 fwpgccllvkrccgncacclhncnecqcvpskvtkyhevlqlrpkgtgvrghksltdval 329  
 QY 121 EHHEEDCVCRGSTGG 136  
 DB 330 ehheecdvcrgstgg 345

RESULT 8

AAB44322 ID AAB44322 standard; Protein: 345 AA.

AC AAB44322;

DT 08-FEB-2001 (first entry)

XX Human PRO200 (UNQ174) protein sequence SEQ ID NO:488.

DE Human; secreted protein; transmembrane protein; PRO; EST; cytostatic;  
 KW expressed sequence tag; detection; cancer.

XX Homo sapiens.

XX WO200053756-A2.

XX 14-SEP-2000.

XX 18-FEB-2000; 2000WO-US04341.

XX 08-MAR-1999; 99WO-US05028.

XX 12-MAR-1999; 99US-0123957.

XX 29-MAR-1999; 99US-0126773.

XX 21-APR-1999; 99US-0130232.

XX 28-APR-1999; 99US-0131445.

XX 14-MAY-1999; 99US-0134287.

XX 23-JUN-1999; 99US-0141037.

XX 26-JUL-1999; 99US-0145698.

XX 29-OCT-1999; 99US-0162506.

XX 30-NOV-1999; 99WO-US28313.

XX 02-DEC-1999; 99WO-US28551.

XX 16-DEC-1999; 99WO-US28565.

XX 30-DEC-1999; 99WO-US30095.

XX 30-DEC-1999; 99WO-US31243.

XX 03-JAN-2000; 99WO-US31274.

XX 06-JAN-2000; 2000WO-US00219.

XX 06-JAN-2000; 2000WO-US00277.

XX 06-JAN-2000; 2000WO-US00376.

PA (GETH ) GENENTECH INC.

XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

PI Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;

PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA;

PI Shelton DL, Stewart TA, Tumas D, Williams PM, Wood WI;

XX WPI; 2000-611443/58.

DR N-PSDB; AAC78582.

XX Novel PRO polypeptides and polynucleotides used in detection methods,  
 PT to target bioactive molecules to specific cells, and to modulate  
 PT cellular activities -

XX Claim 12; Fig 207; 636pp; English.

XX AAC78458 to AAC78599 represent polynucleotide and EST (expressed  
 CC sequence tag) sequences which encode secreted or transmembrane PRO  
 CC polypeptides. The PRO polynucleotides and polypeptides have cytostatic  
 CC activity. The polynucleotides and polypeptides can be used for detecting  
 CC the presence of PRO polypeptides in samples, for linking bioactive  
 CC molecules to cells and for modulating biological activities of cells,  
 CC using the polypeptides for specific targeting. The polypeptide targeting  
 CC can be used to kill the target cells, e.g. for the treatment of cancers.  
 CC The polypeptide pairs provide specific targeting of bioactive molecules  
 CC to cells. AAC78600 to AAC78987 represent PCR primers and probes used in  
 CC the isolation of the PRO polynucleotide sequences.

XX Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;

Best Local Similarity 100.0%; Pred. No. 4.7e-71;

Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLGKAFVGRKSRVVDNLNLTTEVRLYSCTPRNFSVSTREELKRTDTI 60

DB 210 ldledlyrptwqlgkafvgrksrvvdnlnteervrlyscprnfsvireelkrtdtl 269

QY 61 FWPGLLVKRCGGNCACCLHNCNECCVPSKVKTKYHEVLQLRPKTGVRGLHKS LTDVAL 120

DB 270 fwpgccllvkrccgncacclhncnecqcvpskvtkyhevlqlrpkgtgvrghksltdval 329

QY 121 EHHEEDCVCRGSTGG 136

DB 330 ehheecdvcrgstgg 345

RESULT 9

AAB10633

ID AAB10633 standard; Protein: 345 AA.

AC AAB10633;

DT 19-JAN-2001 (first entry)

DE Human RACE generated VEGF-X protein.

XX VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;  
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;  
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
 KW venous sore; diabetic ulcer; burns; skin graft growth.

XX Homo sapiens.

XX WO200037641-A2.

XX 29-JUN-2000.

XX 21-DEC-1999; 99WO-US30503.

XX 22-DEC-1998; 98GB-0028377.

XX 18-MAR-1999; 99US-0124967.

XX 08-NOV-1999; 99US-0164131.

XX (JANC ) JANSSEN PHARM NV.

XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;

PI Dhanaraj SN, Xu J;



PN WO200037641-A2.  
 XX 29-JUN-2000.  
 PD 21-DEC-1999; 99WO-US30503.  
 XX 22-DEC-1998; 98GB-0028377.  
 PR 18-MAR-1999; 99US-0124967.  
 PR 08-NOV-1999; 99US-0164131.  
 XX (JANC ) JANSSEN PHARM NV.  
 PA Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;  
 PI Dhanaraj SN, Xu J;  
 PI WPI; 2000-442669/38.  
 DR N-PSDB; AAA71955.  
 DR  
 XX New vascular endothelial growth factor protein, useful for treating or  
 PT preventing diseases associated with inappropriate angiogenesis activity  
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -  
 XX Disclosure; Fig 9; 127pp; English.  
 XX This invention describes a novel vascular endothelial growth factor-X  
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
 CC vulnary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and  
 CC antidiabetic activity and acts as an angiogenesis and vascularization  
 CC regulator. An antisense molecule of the invention is useful for treating  
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
 CC retinopathy by inhibiting angiogenic activity or inappropriate  
 CC vascularization including formation and proliferation of new blood  
 CC vessels, growth and development of tissues, tissue regeneration and organ  
 CC and tissue repair in a subject. The products of the invention are useful  
 CC for preparing medicaments for treating wounds such as dermal ulcers,  
 CC skin graft growth, tissue repair, proliferation of new blood vessels,  
 CC tissue regeneration and organ repair by promoting angiogenic activity or  
 CC vascularization. This sequence represents the human VEGF-X protein  
 CC isolated from clones 4 and 7 described in the method of the invention.  
 XX Sequence 345 AA;  
 SQ  
 Query Match 100.0%; Score 754; DB 21; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTVEEVLRYLSCTPRNFSVSIREELKRTDTI 60  
 Db 210 ldledlyrptwqllgkafvgrksrvvdlnlteevrlyscprnfsvsireelkrttdti 269  
 QY 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVKYKHYEVLQRLPKTGVRLGHLKSLTDVAL 120  
 Db 270 fwpgcillvkrcggncaccclhncnecqcvpskvtkkyhevlqlrpkgtvrglghksltdval 329  
 QY 121 EHHEECDCVCRGSGTG 136  
 Db 330 ehheecdvcrgstgg 345  
 RESULT 12  
 AAB10636  
 ID AAB10636 standard; Protein; 345 AA.  
 XX AAB10636;  
 AC AAB10636;  
 XX 19-JAN-2001 (first entry)  
 XX Human VEGF-X protein #2 isolated from clones 4 and 7.  
 DE VEGF-X; vascular endothelial growth factor; human; vulnary; cytostatic;  
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;  
 KW

KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
 KW venous sore; diabetic ulcer; burns; skin graft growth.  
 XX Homo sapiens.  
 OS WO200037641-A2.  
 XX 29-JUN-2000.  
 PD 21-DEC-1999; 99WO-US30503.  
 XX 22-DEC-1998; 98GB-0028377.  
 PR 18-MAR-1999; 99US-0124967.  
 PR 08-NOV-1999; 99US-0164131.  
 XX (JANC ) JANSSEN PHARM NV.  
 PA Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;  
 PI Dhanaraj SN, Xu J;  
 PI WPI; 2000-442669/38.  
 DR N-PSDB; AAA71955.  
 DR  
 XX New vascular endothelial growth factor protein, useful for treating or  
 PT preventing diseases associated with inappropriate angiogenesis activity  
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -  
 XX Claim 1; Fig 10; 127pp; English.  
 XX This invention describes a novel vascular endothelial growth factor-X  
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
 CC vulnary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and  
 CC antidiabetic activity and acts as an angiogenesis and vascularization  
 CC regulator. An antisense molecule of the invention is useful for treating  
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
 CC retinopathy by inhibiting angiogenic activity or inappropriate  
 CC vascularization including formation and proliferation of new blood  
 CC vessels, growth and development of tissues, tissue regeneration and organ  
 CC and tissue repair in a subject. The products of the invention are useful  
 CC for preparing medicaments for treating wounds such as dermal ulcers,  
 CC skin graft growth, tissue repair, proliferation of new blood vessels,  
 CC tissue regeneration and organ repair by promoting angiogenic activity or  
 CC vascularization. This sequence represents the human VEGF-X protein  
 CC isolated from clones 4 and 7 described in the method of the invention.  
 XX Sequence 345 AA;  
 SQ  
 Query Match 100.0%; Score 754; DB 21; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTVEEVLRYLSCTPRNFSVSIREELKRTDTI 60  
 Db 210 ldledlyrptwqllgkafvgrksrvvdlnlteevrlyscprnfsvsireelkrttdti 269  
 QY 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVKYKHYEVLQRLPKTGVRLGHLKSLTDVAL 120  
 Db 270 fwpgcillvkrcggncaccclhncnecqcvpskvtkkyhevlqlrpkgtvrglghksltdval 329  
 QY 121 EHHEECDCVCRGSGTG 136  
 Db 330 ehheecdvcrgstgg 345  
 RESULT 13  
 AAB10644  
 ID AAB10644 standard; Protein; 345 AA.  
 XX AAB10644;  
 AC AAB10644;

XX 19-JAN-2001 (first entry)  
XX Human VEGF-X protein #4.  
XX VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;  
XX antiarthritis; antiprosoritic; antidiabetic; treatment;  
XX angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
XX rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
XX tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
XX venous sore; diabetic ulcer; burns; skin graft growth.  
XX Homo sapiens.  
XX WO200037641-A2.  
XX 29-JUN-2000.  
XX 21-DEC-1999; 99WO-US30503.  
XX 22-DEC-1998; 98GB-0028377.  
XX 18-MAR-1999; 99US-0124967.  
XX 08-NOV-1999; 99US-0164131.  
XX (JANC ) JANSSEN PHARM NV.  
XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;  
XX Dhanaraj SN, Xu J;  
XX WPI; 2000-442669/38.  
XX N-PSDB; AAA71990.  
XX New vascular endothelial growth factor protein, useful for treating or  
XX preventing diseases associated with inappropriate angiogenesis activity  
XX such as cancer, rheumatoid arthritis, psoriasis and wounds -  
XX Disclosure; Fig 30B; 127pp; English.  
XX This invention describes a novel vascular endothelial growth factor-X  
XX (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
XX vulnery, cytostatic, antirheumatic, antiarthritic, antiprosoritic and  
XX antiangiogenic activity and acts as an angiogenesis and vascularization  
XX regulator. An antisense molecule of the invention is useful for treating  
XX or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
XX retinopathy by inhibiting angiogenic activity or inappropriate  
XX vascularization including formation and proliferation of new blood  
XX vessels, growth and development of tissues, tissue regeneration and organ  
XX and tissue repair in a subject. The products of the invention are useful  
XX for preparing medicaments for treating wounds such as dermal ulcers,  
XX pressure sores, venous sores, diabetic ulcers and burns and to promote  
XX skin graft growth, tissue repair, proliferation of new blood vessels,  
XX tissue regeneration and organ repair by promoting angiogenic activity or  
XX vascularization. This sequence represents a human VEGF-X protein  
XX described in the method of the invention.  
XX Sequence 345 AA;  
XX Query Match 100.0%; Score 754; DB 21; Length 345;  
XX Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
XX Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 LDLEDYRPTWQLLGKAFVFGKRSRVVDNLNLTTEEVRLYSCTPRNFSVIREELKRTDTI 60  
DB 210 ldledyrptwqllgkafvfgkrsrvvdnlntteevrlyscprnfsvireelkrttdti 269  
QY 61 FWPGLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQRLPKTVGRLHKLSDVAL 120  
DB 270 fwpgccllvkrccgncacclhncnecqcvpskvtkkynhevlqlrpkrtgvrghklsldval 329  
QY 121 EHHEDCDVCRGSGTG 136  
DB 330 ehhecdcdvcrgstgg 345

## RESULT 14

AAB10650

ID AAB10650 standard; Protein; 345 AA.

XX AAB10650;

XX 19-JAN-2001 (first entry)

XX Human 990126vegX protein.

XX VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;  
XX antiarthritis; antiprosoritic; antidiabetic; treatment;  
XX angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
XX rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
XX tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
XX venous sore; diabetic ulcer; burns; skin graft growth.

XX Homo sapiens.

XX WO200037641-A2.

XX 29-JUN-2000.

XX 21-DEC-1999; 99WO-US30503.

XX 22-DEC-1998; 98GB-0028377.

XX 18-MAR-1999; 99US-0124967.

XX 08-NOV-1999; 99US-0164131.

XX (JANC ) JANSSEN PHARM NV.

XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;

XX Dhanaraj SN, Xu J;

XX WPI; 2000-442669/38.

XX New vascular endothelial growth factor protein, useful for treating or  
XX preventing diseases associated with inappropriate angiogenesis activity  
XX such as cancer, rheumatoid arthritis, psoriasis and wounds -

XX Disclosure; Fig 11; 127pp; English.

XX This invention describes a novel vascular endothelial growth factor-X  
XX (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
XX vulnery, cytostatic, antirheumatic, antiarthritic, antiprosoritic and  
XX antiangiogenic activity and acts as an angiogenesis and vascularization  
XX regulator. An antisense molecule of the invention is useful for treating  
XX or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
XX retinopathy by inhibiting angiogenic activity or inappropriate  
XX vascularization including formation and proliferation of new blood  
XX vessels, growth and development of tissues, tissue regeneration and organ  
XX and tissue repair in a subject. The products of the invention are useful  
XX for preparing medicaments for treating wounds such as dermal ulcers,  
XX pressure sores, venous sores, diabetic ulcers and burns and to promote  
XX skin graft growth, tissue repair, proliferation of new blood vessels,  
XX tissue regeneration and organ repair by promoting angiogenic activity or  
XX vascularization. This sequence represents the human 990126vegX protein  
XX used to illustrate the method of the invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;

Best Local Similarity 100.0%; Pred. No. 4.7e-71;

Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDYRPTWQLLGKAFVFGKRSRVVDNLNLTTEEVRLYSCTPRNFSVIREELKRTDTI 60

DB 210 ldledyrptwqllgkafvfgkrsrvvdnlntteevrlyscprnfsvireelkrttdti 269

QY 61 FWPGLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQRLPKTVGRLHKLSDVAL 120

|||||  
 Db 270 fwpgcllvkrcgncacclhncnecqcvpskvtkyhevlqlrpktgvrghksltdval 329  
 QY 121 EHHEECDCVCRGSTGG 136  
 Db 330 ehheecdcvcrgstg 345  
 RESULT 15  
 AAB10651  
 ID AAB10651 standard; Protein; 345 AA.  
 AC AAB10651;  
 XX  
 XX 19-JAN-2001 (first entry)  
 DE Human VEGF-X protein #3.  
 XX  
 KW VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;  
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;  
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
 KW venous sore; diabetic ulcer; burns; skin graft growth.  
 XX  
 OS Homo sapiens.  
 XX  
 XX WO200037641-A2.  
 XX  
 PD 29-JUN-2000.  
 XX  
 XX 21-DEC-1999; 99WO-US30503.  
 XX  
 XX 22-DEC-1998; 98GB-0028377.  
 PR 18-MAR-1999; 99US-0124967.  
 PR 08-NOV-1999; 99US-0164131.  
 XX  
 XX (JANC ) JANSSEN PHARM NV.  
 XX  
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gostewska A;  
 PI Dhanaraj SN, Xu J;  
 PI  
 XX WPI; 2000-442669/38.  
 DR  
 XX  
 XX New vascular endothelial growth factor protein, useful for treating or  
 PT preventing diseases associated with inappropriate angiogenesis activity  
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -  
 XX  
 PS Claim 72; Fig 12; 127pp; English.  
 CC  
 CC This invention describes a novel vascular endothelial growth factor-X  
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
 CC vulnery, cytostatic, antirheumatic, antiarthritic, antipsoriatic and  
 CC antidiabetic activity and acts as an angiogenesis and vascularization  
 CC regulator. An antisense molecule of the invention is useful for treating  
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
 CC retinopathy by inhibiting angiogenic activity or inappropriate  
 CC vascularization including formation and proliferation of new blood  
 CC vessels, growth and development of tissues, tissue regeneration and organ  
 CC and tissue repair in a subject. The products of the invention are useful  
 CC for preparing medicaments for treating wounds such as dermal ulcers,  
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote  
 CC skin graft growth, tissue repair, proliferation of new blood vessels,  
 CC tissue regeneration and organ repair by promoting angiogenic activity or  
 CC vascularization. This sequence represents the human VEGF-X protein  
 CC described in the method of the invention.  
 XX  
 XX Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLGKAFVGRKSRVVDLNLTEEVRLYSCTPRNFVSIREELKRTDTI 60  
 |||||  
 Db 210 ldledlyrptwqlgkafvgrksrvvdnlnteevrlyscprnfsvsireelkrtdti 269  
 |||||  
 QY 61 FWPGCLLVKRCGNCACCLHNCNECQCVPSKVTKYKHYEVLQLRPKTGVRGLHKS LTDVAL 120  
 |||||  
 Db 270 fwpgcllvkrcgncacclhncnecqcvpskvtkyhevlqlrpktgvrghksltdval 329  
 |||||  
 QY 121 EHHEECDCVCRGSTGG 136  
 |||||  
 Db 330 ehheecdcvcrgstg 345  
 |||||  
 RESULT 16  
 AAB19578  
 ID AAB19578 standard; Protein; 345 AA.  
 XX  
 XX AAB19578;  
 XX  
 XX 22-JAN-2001 (first entry)  
 DT  
 DE Human PRO200 (vascular endothelial growth factor E).  
 XX  
 KW PRO200; vascular epithelial growth factor E; VEGF-E; human;  
 KW ocular disease; retinopathy; maculopathy; therapy;  
 KW retinitis pigmentosa; macular degeneration; retinal detachment;  
 KW retinal tear; macular hole; myopia; traumatic chorioretinopathy;  
 KW acute retinal necrosis syndrome; contusion; edema;  
 KW retinal vision occlusion; vascular disease; retinal vasculitis;  
 KW thrombocytopenic purpura; uveitis; retinal occlusion.  
 XX  
 OS Homo sapiens.  
 XX  
 XX Key  
 FH Peptide  
 FT 1..14  
 FT /label= Signal\_peptide  
 FT Protein  
 FT 15..345  
 FT /label= Mature\_Pro200  
 FT Modified-site  
 FT 25..29  
 FT /note= "Asn is N-glycosylated"  
 FT Modified-site  
 FT 55..59  
 FT /note= "Asn is N-glycosylated"  
 FT Modified-site  
 FT 254..258  
 FT /note= "Asn is N-glycosylated"  
 FT Modified-site  
 FT 15..21  
 FT /note= "N-myristoylation"  
 FT Modified-site  
 FT 117..123  
 FT /note= "N-myristoylation"  
 FT Modified-site  
 FT 127..133  
 FT /note= "N-myristoylation"  
 FT Modified-site  
 FT 281..287  
 FT /note= "N-myristoylation"  
 FT Modified-site  
 FT 282..288  
 FT /note= "N-myristoylation"  
 FT Modified-site  
 FT 319..325  
 FT /note= "Amidation"  
 XX  
 PN WO200053760-A2.  
 XX  
 XX 14-SEP-2000.  
 PD  
 XX 10-MAR-2000; 2000WO-US06319.  
 PF  
 XX 12-MAR-1999; 99US-0123957.  
 PR  
 XX (GETH ) GENENTECH INC.  
 XX  
 XX Ferrara N, Goddard A, Gurney AL, Hebert C, Henzel WJ, Kabakoff RC;  
 PI Klein RD, Kljavin IJ, Kuo SS, La Fleur M, Wood WI;  
 PI WPI; 2000-587437/55.  
 DR N-PSDB; AAA88515.

XX Novel PRO polypeptides useful for preventing or rescuing retinal cells  
PT from injury caused by ocular diseases such as retinitis pigmentosa,  
PT retinopathy, retinal degenerative diseases, degenerative myopia,  
PT uveitis -  
XX  
XX  
PS Claim 2; Fig 2; 140pp; English.  
XX  
CC The present sequence is that of human PRO200 or vascular  
CC endothelial growth factor E (VEGF-E), as predicted from a cDNA  
CC clone (see AAA88515) that was isolated from a glioma cell line G61  
CC library using probes (see AAA88523-26) based on an expressed sequence  
CC tag (see AAA88522) that showed homology to VEGF. PRO200 has a  
CC predicted mol.wt. of 39,029 and a pI of about 6.06. A method for  
CC producing PRO polypeptides, including PRO200, using a host cell  
CC transformed with a vector comprising a PRO nucleic acid is claimed.  
CC The invention relates to the use of PRO polypeptides to delay,  
CC prevent or rescue retinal cells such as retinal neurons selected from  
CC photoreceptors, retinal ganglion cells, displaced retinal ganglion  
CC cells, amacrine cells, displaced amacrine cells, horizontal and  
CC bipolar neurons, and supportive cells (including Mueller cells and  
CC pigment epithelial cells) from injury and degradation. The retinal  
CC cells are preferably photoreceptors and photoreceptor cell injury or  
CC death is caused by retinal injury, light or environmental trauma or  
CC by an ocular disease selected from retinitis pigmentosa, macular  
CC degeneration, including age-related, retinal detachment, retinal  
CC tears, retinopathy, retinal degenerative diseases, macular holes,  
CC degenerative myopia, acute retinal necrosis syndrome, traumatic  
CC chorioretinopathies or contusion such as Purtscher's retinopathy,  
CC edema, ischemic conditions such as central or branch retinal vision  
CC occlusion, collagen vascular diseases, thrombocytopenic purpura,  
CC uveitis, retinal vasculitis and occlusion associated with Eales  
CC disease and systemic lupus erythematosus (claimed).  
XX  
XX Sequence 345 AA;  
SQ

Query Match 100.0%; Score 754; DB 21; Length 345;  
Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LDLEDLPTWLLGKAFVFGKSRVVDNLNLTVEVRLVSCPTPRNFSVIREELKRTDTI 60  
|||||  
Db 210 LDLEDLPTWLLGKAFVFGKSRVVDNLNLTVEVRLVSCPTPRNFSVIREELKRTDTI 269  
|||||

Qy 61 FWPGLLVKRCGNCACCLHNCQCVPSKVTKKYHEVLQLRPKTVGRLHKLSDVAL 120  
|||||  
Db 270 fwpgcllvkrcgncacclhncqcvpskvtkkyhevlqlrpkgtvgrglhksltdval 329  
|||||

Qy 121 EHHECDVCVCGSTGG 136  
|||||  
Db 330 ehhecdvcvrgstgg 345

RESULT 17  
AAB33414  
ID AAB33414 standard; Protein; 345 AA.  
XX  
AC AAB33414;  
XX  
XX 29-JAN-2001 (first entry)  
XX  
XX Human PRO200 protein UNQ174 SEQ ID NO:2.  
XX  
XX Human; immune related disease; diagnosis; antiinflammatory; cardiant;  
KW dermatological; antirheumatic; antirheumatic; immunosuppressive;  
KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;  
KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;  
KW antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;  
KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;  
KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;  
KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;  
KW autoimmune thrombocytopaenia; immune-mediated renal disease;

KW demyelinating disease; hepatobiliary disease; Whipple's disease;  
KW inflammatory bowel disease; gluten-sensitive enteropathy;  
KW autoimmune disease; immune-mediated skin disease; allergic disease;  
KW immunological disease; transplantation associated disease;  
KW graft rejection; graft-versus-host-disease.  
XX  
XX Homo sapiens.  
XX  
XX WO200053758-A2.  
XX  
XX 14-SEP-2000.  
XX  
XX 02-MAR-2000; 2000WO-US05841.  
XX  
XX 08-MAR-1999; 99WO-US05028.  
XX 10-MAR-1999; 99US-0123618.  
XX 12-MAR-1999; 99US-0123957.  
XX 23-MAR-1999; 99US-0125775.  
XX 12-APR-1999; 99US-0128849.  
XX 20-APR-1999; 99WO-US08615.  
XX 28-APR-1999; 99US-0131445.  
XX 04-MAY-1999; 99US-0132371.  
XX 14-MAY-1999; 99US-0134287.  
XX 02-JUN-1999; 99WO-US12252.  
XX 23-JUN-1999; 99US-0141037.  
XX 26-JUL-1999; 99US-0144758.  
XX 28-JUL-1999; 99US-0145698.  
XX 01-SEP-1999; 99WO-US20111.  
XX 08-SEP-1999; 99WO-US20594.  
XX 13-SEP-1999; 99WO-US20944.  
XX 15-SEP-1999; 99WO-US21090.  
XX 05-OCT-1999; 99WO-US21547.  
XX 29-OCT-1999; 99WO-US23089.  
XX 29-NOV-1999; 99US-0162506.  
XX 30-NOV-1999; 99WO-US28214.  
XX 30-NOV-1999; 99WO-US28313.  
XX 01-DEC-1999; 99WO-US28409.  
XX 01-DEC-1999; 99WO-US28301.  
XX 02-DEC-1999; 99WO-US28634.  
XX 02-DEC-1999; 99WO-US28551.  
XX 02-DEC-1999; 99WO-US28564.  
XX 16-DEC-1999; 99WO-US28565.  
XX 20-DEC-1999; 99WO-US30095.  
XX 30-DEC-1999; 99WO-US30999.  
XX 05-JAN-2000; 99WO-US31274.  
XX 06-JAN-2000; 2000WO-US00219.  
XX 06-JAN-2000; 2000WO-US00277.  
XX 11-FEB-2000; 2000WO-US00376.  
XX 18-FEB-2000; 2000WO-US03565.  
XX 18-FEB-2000; 2000WO-US04341.  
XX 22-FEB-2000; 2000WO-US04342.  
XX 22-FEB-2000; 2000WO-US04414.  
XX  
XX (GETH ) GENENTECH INC.  
XX  
XX Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;  
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;  
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;  
XX  
XX WPI; 2000-572271/53.  
XX N-PSDB; AAC58579.  
XX  
XX Sixty four PRO polypeptides, useful in the diagnosis and treatment of  
PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid  
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -  
XX  
XX Claim 33; Fig 2; 309pp; English.  
XX  
XX The present invention describes sixty four human PRO proteins which can  
CC be used in the treatment of immune related diseases. The human PRO  
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for  
CC treating and diagnosing immune related disorders. The disorders are

CC selected from systemic lupus erythematosus, rheumatoid arthritis,  
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,  
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's  
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic  
CC anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus,  
CC immune-mediated renal disease, demyelinating diseases of the central  
CC and peripheral nervous systems, hepatobiliary diseases, inflammatory  
CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,  
CC autoimmune or immune-mediated skin diseases, allergic diseases,  
CC immunological diseases of the lung, and transplantation associated  
CC diseases including graft rejection and graft-versus-host-disease.  
CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used  
CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and  
CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein  
CC sequences given in the exemplification of the present invention.  
XX  
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;  
Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTTEVRLYSCTPRNFSVSIREELKRTDTI 60  
Db 210 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTTEVRLYSCTPRNFSVSIREELKRTDTI 269  
QY 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTYKHYEVLQRLPKTGVRGLHKSITDVAL 120  
Db 270 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTYKHYEVLQRLPKTGVRGLHKSITDVAL 329  
QY 121 EHHEECDCVCRGSGTG 136  
Db 330 ehheecdcvcrsgtg 345

RESULT 18  
AAB24412  
ID AAB24412 standard; Protein; 345 AA.  
AC AAB24412;  
XX  
DT 07-NOV-2000 (first entry)  
DE Human PRO713 protein sequence SEQ ID NO:137.  
XX  
KW Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;  
KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;  
KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;  
KW cytotstatic; gene therapy; vaccine.  
XX  
OS Homo sapiens.  
XX  
FN WO200032221-A2.  
PD 08-JUN-2000.  
XX  
XX 30-NOV-1999; 99WO-US28313.  
XX  
PR 01-DEC-1998; 98WO-US25108.  
PR 16-DEC-1998; 98US-0112850.  
PR 12-JAN-1999; 99US-0115554.  
PR 08-MAR-1999; 99WO-US05028.  
PR 12-MAR-1999; 99US-0123957.  
PR 28-APR-1999; 99US-0131445.  
PR 14-MAY-1999; 99US-0134287.  
PR 02-JUN-1999; 99WO-US12252.  
PR 23-JUN-1999; 99US-0141037.  
PR 20-JUL-1999; 99US-0144758.  
PR 26-JUL-1999; 99US-0145698.  
PR 01-SEP-1999; 99WO-US20111.  
PR 08-SEP-1999; 99WO-US20594.  
PR 13-SEP-1999; 99WO-US20944.

PR 15-SEP-1999; 99WO-US21090.  
PR 15-SEP-1999; 99WO-US21547.  
PR 05-OCT-1999; 99WO-US23089.  
PR 29-OCT-1999; 99US-0162506.  
XX  
PA (GETH ) GENENTECH INC.  
XX  
PI Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;  
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;  
PI Watanabe CK, Williams PM, Wood WI;  
XX  
DR WPI; 2000-412154/35.  
DR N-PSDB; AAA77621.  
XX  
PT Nucleic acids encoding PRO polypeptides useful for preventing,  
PT diagnosing and treating a cardiovascular, endothelial or  
PT angiogenic disorders in mammals -  
XX  
PS Claim 72; Fig 50; 315pp; English.  
XX  
CC The present invention describes nucleic acids encoding PRO polypeptides  
CC useful for preventing, diagnosing and treating a cardiovascular  
CC cardiovascular, endothelial or angiogenic disorder in mammals by  
CC modulating cell proliferation, angiogenesis and cardiovascularisation,  
CC and for identifying agonists and antagonists of these processes. The  
CC nucleic acids and the proteins they encode may be used in the  
CC prevention, treatment and diagnosis of diseases associated with  
CC inappropriate PRO expression such as cardiovascular, endothelial or  
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and  
CC cardiac hypertrophy). For example, the nucleic acids (Ncs) and vectors  
CC containing them and the PRO polypeptide may be used to treat disorders  
CC associated with decreased PRO expression. AAA77510 to AAA77721 and  
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in  
CC the exemplification of the present invention.  
XX  
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;  
Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTTEVRLYSCTPRNFSVSIREELKRTDTI 60  
Db 210 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLNLTTEVRLYSCTPRNFSVSIREELKRTDTI 269  
QY 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTYKHYEVLQRLPKTGVRGLHKSITDVAL 120  
Db 270 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTYKHYEVLQRLPKTGVRGLHKSITDVAL 329  
QY 121 EHHEECDCVCRGSGTG 136  
Db 330 ehheecdcvcrsgtg 345

RESULT 19  
AAB01419  
ID AAB01419 standard; Protein; 345 AA.  
AC AAB01419;  
XX  
DT 20-OCT-2000 (first entry)  
XX  
DE Human TANGO 128.  
XX  
KW TANGO; 128; 140; 197; 212; 213; 224; 239; modulating agent; asthma;  
KW graft versus-host diseases; rheumatoid arthritis; psoriasis;  
KW inflammatory bowel disease; septic shock; ulcerative colitis;  
KW Crohn's disease; chronic myelogenous leukemia; cancer; liver  
KW disease; Hodgkin's disease; osteoarthritis; Lyme's disease;  
KW cachexia; autoimmune disease; myasthenia gravis; autoimmune diabetes;  
KW systemic lupus erythematosus; transgenic animal; diagnosis;  
KW prognosis; prophylactic; therapeutic; human.

XX OS Homo sapiens.  
 XX PN WO200039284-A1.  
 XX PD 06-JUL-2000.  
 XX XX 23-DEC-1999; 99WO-US31025.  
 XX XX 30-DEC-1998; 98US-0223546.  
 XX XX (MILL-) MILLENNIUM PHARM INC.  
 XX XX Holtzman DA;  
 XX XX WPI; 2000-465743/40.  
 XX XX N-PSDB; AAA47452.  
 XX XX Novel nucleic acid sequences encoding TANGO-128, 140, 197, 212, 213,  
 XX XX 224 and 239 polypeptides useful for the treatment of asthma, rheumatoid  
 XX XX arthritis, psoriasis and autoimmune diseases  
 XX XX Claim 8; Fig 1; 209pp; English.  
 XX XX Nucleic acids encoding TANGO polypeptides are useful as modulating  
 XX XX agents for regulating cellular processes like asthma, graft  
 XX XX versus-host diseases, rheumatoid arthritis, psoriasis, inflammatory  
 XX XX bowel disease, septic shock, ulcerative colitis, Crohn's disease,  
 XX XX chronic myelogenous leukemia, cancer, liver disease, Hodgkin's  
 XX XX disease, osteoarthritis, Lyme's disease, cachexia and autoimmune  
 XX XX diseases e.g. myasthenia gravis, autoimmune diabetes and systemic  
 XX XX lupus erythematosus. The nucleic acids are also useful for producing  
 XX XX transgenic animals and the TANGO polypeptides themselves. Partial  
 XX XX TANGO-128, 140, 197, 212, 213, 224, 239 sequences are useful in  
 XX XX forensic biology, for diagnostic assays, prognostic assays,  
 XX XX pharmacogenomics and for monitoring clinical trials. TANGO  
 XX XX polypeptides are suitable for both prophylactic and therapeutic  
 XX XX methods for treating a subject at risk of a disorder or having a  
 XX XX disorder associated with aberrant TANGO expression. A wide range  
 XX XX of cellular disorders can be treated.  
 XX XX Sequence 345 AA;  
 XX XX  
 XX XX Query Match 100.0%; Score 754; DB 21; Length 345;  
 XX XX Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 XX XX Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Qy 1 LDLEDLYRPTWLLGKAFVGRKSRVVDNLNLTVEVRLYSCTPRNFSVSIREELKRTDTI 60  
 Db 210 lldledlyrptwllgkafvgrksrvvdnlnteevrlysctprnfsvsireelkrtdti 269  
 Qy 61 FWPGLLYKRCGGNCACCLHNCQCVPSKYTKKHYEVQLAPKTVGRGLHKSILTDVAL 120  
 Db 270 fwpzgllykrcggncacclhncqcvpskytkkhyevqlaprkvgvrglhxsltdval 329  
 Qy 121 EHHEECDCVCRGSGTG 136  
 Db 330 ehneecdcvcrgstg 345  
 RESULT 20  
 AAB03003  
 ID AAB03003 standard; Protein; 345 AA.  
 XX AC  
 XX AC AAB03003;  
 XX DT 25-SEP-2000 (first entry)  
 XX XX Human growth factor related molecule GFRP-4.  
 XX XX Human GFRP-4; growth factor related molecule; diseased breast tissue;  
 XX KW Human morphogenetic protein 1; BMP-1; inflammation; immune response;  
 KW bone morphogenetic protein 1; BMP-1; inflammation; immune response;

KW reproductive tissue; reproductive tissue; developmental disorder; cell  
 KW proliferative disorder; immune disorder; reproductive disorder;  
 KW cardiovascular disorder; bacterial infection; viral; fungal; parasitic;  
 KW cancer; allergy; asthma; arteriosclerosis; therapy; diagnosis.  
 XX OS Homo sapiens.  
 XX XX Key Location/Qualifiers  
 XX XX Peptide 1..14 /note= "Signal peptide"  
 XX XX Modified-site 20 /note= "Phosphorylated by casein kinase II"  
 XX XX Modified-site 25 /note= "N-glycosylated"  
 XX XX Modified-site 27 /note= "Phosphorylated by protein kinase C"  
 XX XX Modified-site 34 /note= "Phosphorylated by casein kinase II and  
 XX XX protein kinase C"  
 XX XX Domain 48..160 /note= "CUB domain"  
 XX XX Modified-site 55 /note= "N-glycosylated"  
 XX XX Modified-site 60 /note= "Phosphorylated by protein kinase C"  
 XX XX Modified-site 89 /note= "Phosphorylated by casein kinase II"  
 XX XX Disulfide-bond 104..124  
 XX XX Modified-site 194 /note= "Phosphorylated by casein kinase II"  
 XX XX Modified-site 195 /note= "Phosphorylated by casein kinase II"  
 XX XX Region 229..310 /note= "PDGF (platelet-derived growth factor) family  
 XX XX signature"  
 XX XX Modified-site 251 /note= "Phosphorylated by protein kinase C"  
 XX XX Modified-site 254 /note= "N-glycosylated"  
 XX XX Modified-site 258 /note= "Phosphorylated by casein kinase II and  
 XX XX protein kinase C"  
 XX XX Domain 269..337 /note= "PDGF domain"  
 XX XX Modified-site 302 /note= "Phosphorylated by protein kinase C"  
 XX XX Modified-site 323 /note= "Phosphorylated by casein kinase II"  
 XX XX WO200024774-A2.  
 XX XX 04-MAY-2000.  
 XX XX 28-OCT-1999; 99WO-US25458.  
 XX XX 28-OCT-1998; 98US-0181711.  
 XX XX 11-DEC-1998; 98US-0209547.  
 XX XX 17-MAY-1999; 99US-0313457.  
 XX XX (INCY-) INCYTE PHARM INC.  
 XX XX Tang YT, Yue H, Hillman JL, Corley NC, Guegler KJ, Baughn MR;  
 XX XX Au-Young J;  
 XX XX WPI; 2000-350695/30.  
 XX XX N-PSDB; AAA52458.  
 XX XX Human growth factor related molecule protein useful for the diagnosis  
 XX XX and treatment of disorders associated with its activity including  
 XX XX developmental, cell proliferative, immune, reproductive and  
 XX XX cardiovascular disorders and infections -  
 XX XX Claim 1; Fig 4; 80pp; English.  
 PS

XX This sequence represents human growth factor related molecule GFRP-4.  
 CC cDNA encoding GFRP-4 was initially identified in a diseased breast  
 CC tissue cDNA library, and the present sequence is encoded by a consensus  
 CC cDNA derived from several overlapping and/or extended cDNA clones.  
 CC GFRP-4 has chemical and structural homology with human bone  
 CC morphogenetic protein 1 (BMP-1) (27% identity at the BMP-1 C-terminus).  
 CC GFRP-4 was found by Northern analysis to be expressed in reproductive  
 CC and cardiovascular tissue, and in cDNA libraries associated with cancer,  
 CC inflammation and the immune response. GFRP proteins (AAB03000-B03003),  
 CC nucleotides encoding them (AAA52455-A52458), GFRP agonists and  
 CC antagonists may be used to treat a wide variety of diseases associated  
 CC with increased or decreased expression or activity of GFRP proteins.  
 CC Conditions which may be treated include developmental disorders, cell  
 CC proliferative disorders (e.g., cancers), immune disorders (e.g.,  
 CC allergies, asthma), reproductive disorders (e.g., menstrual cycle  
 CC disorders), cardiovascular disorders (e.g., arteriosclerosis) and  
 CC bacterial, viral, fungal or parasitic infections. Additionally, GFRP  
 CC proteins and nucleotides can be used in the diagnosis of such disorders.  
 XX

SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLELDLYRPTWLLGKAFYGRKSRVVDLNLITVEEVLRYLSCTPRNFSVSIREELKRTDTI 60  
 |||||  
 Db 210 ldeledlyrptwllgkafygrksrvvdlnlliteevrlyscprnfsvsireelkrtdti 269  
 |||||

QY 61 FWPGGCLLVKRCGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTVGRGLHKSLLTDVAL 120  
 |||||  
 Db 270 fwpggcllvkrcgncacclhncneqcqpskvtkkyhevlqlrpkvgvrglhkslldval 329  
 |||||

QY 121 EHHECDVCVRGSGTG 136  
 |||||  
 Db 330 ehhecdvcvrgstg 345

RESULT 21  
 AAY96858  
 ID AAY96858 standard; Protein; 345 AA.

XX AAY96858;

XX 26-SEP-2000 (first entry)

XX Human growth factor homologue, ZVEGF3.

XX Vascular endothelial growth factor; homologue; zvegf3; CUB domain;  
 KW Cysteine knot; platelet-derived growth factor; PDGF; neuropilin;  
 KW chromosome 4q28.3; cytostatic; anti-psoriatic; anti-inflammatory;  
 KW anti-diabetic; ophthalmological; anti-rheumatic; anti-arthritis;  
 KW vulnary.

XX Homo sapiens.

XX Key Location/Qualifiers  
 FH Peptide 1..14  
 FT /label= secretory\_peptide  
 FT Domain 46..163  
 FT /label= CUB\_domain  
 FT /note= "forms beta-barrel structure with nine  
 FT distinct beta-strand-like regions"

FT Region 48..51  
 FT /label= Beta-strand-like\_region-1  
 FT Region 55..59  
 FT /label= Beta-strand-like\_region-2  
 FT Region 72..78  
 FT /label= Beta-strand-like\_region-3  
 FT Region 85..90  
 FT /label= Beta-strand-like\_region-4

FT Region 92..94  
 FT /label= Beta-strand-like\_region-5  
 FT Region 107..112  
 FT /label= Beta-strand-like\_region-6  
 FT Region 119..123  
 FT /label= Beta-strand-like\_region-7  
 FT Region 139..146  
 FT /label= Beta-strand-like\_region-8  
 FT Region 156..163  
 FT /label= Beta-strand-like\_region-9  
 FT Peptide 164..234  
 FT /label= Propeptide-like\_sequence  
 FT Cleavage-site 231..232  
 FT /note= "Potential cleavage site"  
 FT Cleavage-site 231..234  
 FT /note= "Furin or furin-like protease target site"  
 FT Domain 234..345  
 FT /label= Growth\_Factor\_Domain  
 FT /note= "Characterized with cystine knot structure"  
 FT Disulfide-bond 250..296  
 FT /note= "forms part of cystine knot"  
 FT Region 251..259  
 FT /label= Beta-strand-like\_region-1  
 FT Region 275..279  
 FT /label= Beta-strand-like\_region-2  
 FT Disulfide-bond 280..335  
 FT /note= "forms part of cystine knot"  
 FT Disulfide-bond 284..337  
 FT /note= "forms part of cystine knot"  
 FT Region 297..301  
 FT /label= Beta-strand-like\_region-5  
 FT Region 329..334  
 FT /label= Beta-strand-like\_region-6  
 XX

PN W0200034474-A2.  
 XX  
 XX 15-JUN-2000.  
 XX  
 XX 07-DEC-1999; 99WO-US28968.  
 XX  
 XX 07-DEC-1998; 98US-0207120.  
 PR 06-JUL-1999; 99US-0142576.  
 PR 21-OCT-1999; 99US-0161653.  
 PR 12-NOV-1999; 99US-0165255.  
 XX  
 PA (ZYMO ) ZYMOGENETICS INC.  
 XX  
 XX Gao Z, Hart CE, Piddington CS, Sheppard PO, Shoemaker KE;  
 PI Gilbertson DG, West JW;  
 XX  
 XX WPI; 2000-423420/36.  
 DR N-PSDB; AAA51498, AAA51499.  
 XX  
 XX Novel zvegf3 polypeptides and nucleotides encoding them useful for  
 XX stimulating growth of smooth muscle cells and fibroblasts comprising an  
 XX epitope bearing portion of a specific amino acid sequence  
 XX  
 XX Claim 1; Page 149; 173pp; English.  
 PS  
 XX This is a human vascular endothelial growth factor homologue, designated  
 CC ZVEGF3. Polypeptides comprising an epitope-bearing portion human or  
 CC murine ZVEGF3 are claimed. The growth factors comprise a growth factor  
 CC domain and a CUB domain (generic sequence motifs are shown in AAY96859  
 CC and AAY96860). The growth factor domain is characterized by an  
 CC arrangement of cysteine residues and beta-strands that is characteristic  
 CC of the "cystine knot" structure of the platelet-derived growth factor  
 CC (PDGF) family. The CUB domain shows homology to CUB domains in  
 CC neuropilins, human bone morphogenetic protein-1, porcine seminal plasma  
 CC protein, bovine acidic seminal fluid protein and Xenopus laevis  
 CC tollid-like protein. Structural analysis and homology predict that  
 CC ZVEGF3 polypeptides complex with a second polypeptide to form multimeric  
 CC proteins. The human zvegf3 gene has been mapped to chromosome 4q28.3.  
 CC ZVEGF3 is useful for stimulating the growth of fibroblasts or smooth



FT Peptide 214..220  
 FT /note= "immunogenic epitope"  
 FT Peptide 249..255  
 FT /note= "immunogenic epitope"  
 FT Peptide 261..267  
 FT /note= "immunogenic epitope"  
 XX  
 PN WO200004183-A1.  
 XX  
 XX 27-JAN-2000.  
 XX  
 XX 14-JUL-1999; 99WO-US15783.  
 XX  
 XX 15-JUL-1998; 98US-0092922.  
 XX  
 XX (HUMA-) HUMAN GENOME SCI INC.  
 XX  
 XX Ruben SM, Young PE;  
 XX  
 XX WPI; 2000-182442/16.  
 DR N-PSDB; AAZ48599.  
 XX  
 XX Novel cDNA encoding human bone morphogenic proteins, vectors, host  
 PT cells and methods of recombinant production, useful for diagnosis and  
 PT treatment of, e.g. bone disorders  
 XX  
 XX Claim 11; Page 183-184; 187pp; English.  
 XX  
 XX The invention provides novel human bone morphogenic proteins (BMP) and  
 CC nucleic acids encoding the BMPs. The BMP polypeptides can be expressed  
 CC by standard recombinant methodology. Determining the presence or absence  
 CC of a mutation in the polynucleotides or determining the presence or  
 CC amount of expression of the polypeptides is useful for diagnosing a  
 CC pathological condition or a susceptibility to a pathological condition  
 CC in a subject. The polynucleotides can also be used to prevent, treat or  
 CC ameliorate a medical condition. The proteins are useful for diagnosis  
 CC and/or treatment of diseases associated with BMPs, in particular bone  
 CC disorders (e.g. osteoarthritis, cartilage defects and tissue repair),  
 CC and in particular for stimulation of angiogenesis. The polynucleotides  
 CC are useful as reagents for differential identification of tissues or cell  
 CC types present in biological samples. The polynucleotides can be used in  
 CC gene therapy to promote the growth of endothelial cells. The present  
 CC sequence represents a BMP of the invention (clone HETAB62).  
 XX  
 SQ Sequence 345 AA;  
 Query Match 100.0%; Score 754; DB 21; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 LDLEDLYRPTWLLGKAFVGRKSRVVDNLLTEEVRLYSCTPRNFSVSIRELKRDTDI 60  
 DB 210 ldledlyrptwllgkafvgrksrvvdlnteervlyscprnfsvsireelkrttdti 269  
 QY 61 FWPGLLVKRCGGNACCLHNCNECQCVPKVTXKYHEVLQLRPKTVGRGLHKSITDVAL 120  
 DB 270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpkrtvgrglhksitdval 329  
 QY 121 EHHEECDCVCRGSGTG 136  
 DB 330 ehheecdcvcrgstgg 345  
 RESULT 24  
 AAB50980  
 ID AAB50980 standard; Protein; 345 AA.  
 XX  
 XX AAB50980;  
 XX  
 DT 21-MAR-2001 (first entry)  
 XX  
 DE Human PRO200 prqtein.

XX Human; PRO; cardiant; antiangiogenic; antiarteriosclerotic; hypotensive;  
 KW vasotropic; antirheumatic; antiarthritic; antiinflammatory; cytostatic;  
 KW vulnery; antiangular; gene therapy; cardiovascular disease;  
 KW endothelial disorder; angiogenic disorder; cancer; periodontal disease;  
 KW wound healing.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200073445-A2.  
 XX  
 PD 07-DEC-2000.  
 XX  
 XX 17-MAY-2000; 2000WO-US13705.  
 XX  
 XX 02-JUN-1999; 99WO-US12252.  
 PR 23-JUN-1999; 99US-0141037.  
 PR 20-JUL-1999; 99US-0144758.  
 PR 26-JUL-1999; 99US-0145698.  
 PR 28-JUL-1999; 99US-0146222.  
 PR 01-SEP-1999; 99WO-US20111.  
 PR 30-NOV-1999; 99WO-US28313.  
 PR 30-NOV-1999; 99WO-US28409.  
 PR 02-DEC-1999; 99WO-US28565.  
 PR 16-DEC-1999; 99WO-US30095.  
 PR 11-FEB-2000; 2000WO-US03565.  
 PR 18-FEB-2000; 2000WO-US04341.  
 PR 18-FEB-2000; 2000WO-US04342.  
 PR 24-FEB-2000; 2000WO-US05004.  
 PR 02-MAR-2000; 2000WO-US05841.  
 PR 10-MAR-2000; 2000WO-US06319.  
 PR 15-MAR-2000; 2000WO-US06884.  
 PR 21-MAR-2000; 2000WO-US07532.  
 PR 30-MAR-2000; 2000WO-US08439.  
 XX  
 XX (GETH ) GENENTECH INC.  
 PA  
 XX Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Gerritsen ME;  
 PI Goddard A, Godowski PJ, Gurney AL, Kuo SS, Mark MR, Marsters SA;  
 PI Paoni NF, Pitti RM, Watanabe CK, Williams PM, Wood WI;  
 XX  
 DR WPI; 2001-025251/03.  
 DR N-PSDB; AAC90564.  
 XX  
 XX Seventeen nucleic acids encoding PRO polypeptides which are useful in  
 PT diagnosis and treatment of cardiovascular, endothelial or angiogenic  
 PT disorders in a mammal -  
 XX  
 XX Claim 71; Fig 4; 182pp; English.  
 PS  
 XX The present sequence is one of seventeen novel PRO polypeptides. The PRO  
 CC nucleic acids, polypeptides, agonists and antagonists are useful for  
 CC treating cardiovascular, endothelial or angiogenic disorders in a mammal.  
 CC Examples of these disorders include cardiac hypertrophy, trauma, cancer,  
 CC age-related macular degeneration, atherosclerosis, hypertension, arterial  
 CC restenosis, Reynaud's disease, rheumatoid arthritis, angina, myocardial  
 CC infarctions, thrombophlebitis and lymphangitis. The PRO polypeptides and  
 CC antagonists are also used to prevent tumour angiogenesis and for treating  
 CC periodontal diseases. They are also used to stimulate wound healing and  
 CC tissue regeneration. The PRO nucleic acids, polypeptides and anti-PRO  
 CC antibodies are useful for diagnosing a cardiovascular, endothelial or  
 CC angiogenic disorder.  
 XX  
 SQ Sequence 345 AA;  
 Query Match 100.0%; Score 754; DB 22; Length 345;  
 Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
 Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 LDLEDLYRPTWLLGKAFVGRKSRVVDNLLTEEVRLYSCTPRNFSVSIRELKRDTDI 60  
 DB 210 ldledlyrptwllgkafvgrksrvvdlnteervlyscprnfsvsireelkrttdti 269

QY 61 FWPQCLLVKRCGGNACCLHNCNECQCVPKVKYKHYEVLQRLPKTGVRLHKSITDVAL 120  
|||||  
Db 270 fwpqcllvkrcggncacclhncneqcqpskvtkkyhevlqlrpkgtgvrghksitdval 329  
QY 121 EHHECDVCVCRGSGTG 136  
|||||  
Db 330 ehhecdvcvrgstgg 345  
RESULT 25  
AAB49895  
ID AAB49895 standard; Protein; 345 AA.  
XX AC AAB49895;  
XX DT 06-MAR-2001 (first entry)  
XX DE Human PRO200 protein sequence.  
XX Human; PRO526; PRO719; PRO200; PRO725; PRO1031; immune related disease;  
KW inflammation; thyroiditis; demyelinating disease; skin disease;  
KW infectious disease.  
XX OS Homo sapiens.  
XX WO200070050-A1.  
XX PN 23-NOV-2000.  
XX PD 21-MAR-2000; 2000WO-US07532.  
XX PF 14-MAY-1999; 99US-0134287.  
XX PR (GETH ) GENENTECH INC.  
XX PA Baker KP, Chen J, Ferrara N, Fong S, Goddard A, Gurney AL;  
PI Hillan KJ, Kuo SS, Tumas D, Wood WI;  
XX WPI: 2001-025022/03.  
XX N-PSDB; AAC88962.  
XX New compositions containing a PRO526, PRO719, PRO725, PRO1031 or PRO200  
PT proteins for modulating immune response or proliferation of  
PT T-lymphocytes in mammal, especially for treating immune related  
PT disorders, e.g. graft rejection -  
XX Claim 31; Fig 10; 133pp; English.  
XX The present invention discloses the coding and protein sequences of human  
CC proteins PRO526, PRO719, PRO725, PRO1031 and PRO200. These proteins,  
CC their coding sequences and antibodies can be used in the treatment of  
CC immune-related diseases, including systemic lupus erythematosus,  
CC rheumatoid arthritis, thyroiditis, immune-mediated renal disease,  
CC demyelinating diseases such as multiple sclerosis, hepatobiliary diseases  
CC including primary biliary cirrhosis, inflammatory bowel disease,  
CC immune-mediated skin diseases such as psoriasis, allergic diseases  
CC including asthma, immunologic diseases of the lung, transplantation  
CC associated diseases and infectious diseases such as HIV and hepatitis.  
XX Sequence 345 AA;  
SQ Query Match 100.0%; Score 754; DB 22; Length 345;  
Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 LDLEDLYRPTWQLLGKAFVGRKSRVVDNLITTEVRLYSCTPRNFVSIRLEKRTDPI 60  
|||||  
Db 210 ldledlyrptwqllgkafvgrksrvvdnliteevrlyscprnfvsirleekrtdti 269  
QY 61 FWPQCLLVKRCGGNACCLHNCNECQCVPKVKYKHYEVLQRLPKTGVRLHKSITDVAL 120  
|||||

Db 270 fwpqcllvkrcggncacclhncneqcqpskvtkkyhevlqlrpkgtgvrghksitdval 329  
QY 121 EHHECDVCVCRGSGTG 136  
|||||  
Db 330 ehhecdvcvrgstgg 345  
RESULT 26  
AAB53074  
ID AAB53074 standard; Protein; 345 AA.  
XX AC AAB53074;  
XX DT 28-FEB-2001 (first entry)  
XX DE Human angiogenesis-associated protein PRO200, SEQ ID NO:51.  
XX Human; angiogenesis-associated protein; PRO; endothelial cell growth;  
KW cardiac hypertrophy; cardiovascular disorder; endothelial disorder;  
KW angiogenic disorder; atherosclerosis; osteoporosis; hypertension;  
KW myocardial infarction; diabetic retinopathy; rheumatoid arthritis;  
KW Crohn's disease; psoriasis; endometriosis; ulcer; wound healing; cancer;  
KW Alzheimer's disease; Huntington's disease; stroke; drug screening;  
KW gene therapy; transgenic animal.  
XX OS Homo sapiens.  
XX WO200053753-A2.  
XX PN 14-SEP-2000.  
XX PD 05-JAN-2000; 2000WO-US00219.  
XX PF 08-MAR-1999; 99WO-US05028.  
XX PR 12-MAR-1999; 99US-0123957.  
XX PR 14-MAY-1999; 99US-0134287.  
XX PR 02-JUN-1999; 99WO-US12252.  
XX PR 23-JUN-1999; 99US-0141037.  
XX PR 20-JUL-1999; 99US-0144758.  
XX PR 26-JUL-1999; 99US-0145698.  
XX PR 01-SEP-1999; 99WO-US20111.  
XX PR 08-SEP-1999; 99WO-US20594.  
XX PR 15-SEP-1999; 99WO-US21090.  
XX PR 15-SEP-1999; 99WO-US21547.  
XX PR 05-OCT-1999; 99WO-US23089.  
XX PR 30-NOV-1999; 99WO-US28313.  
XX PR 30-NOV-1999; 99WO-US28409.  
XX PR 02-DEC-1999; 99WO-US28564.  
XX PR 02-DEC-1999; 99WO-US28565.  
XX (GETH ) GENENTECH INC.  
XX Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Goddard A;  
PI Godowski PJ, Gurney AL, Hillan KJ, Kuo SS, Mark MR, Marsters SA;  
PI Paoni NF, Pitti RM, Watanabe CK, Williams PM, Wood WI;  
XX WPI: 2001-090793/10.  
XX N-PSDB; AAC97404.  
XX New isolated nucleic acid for producing a PRO polypeptide, analyzing  
PT genetic disorders and treating cardiovascular, endothelial or  
PT angiogenic disorders, such as atherosclerosis, wounds or cancer -  
XX Claim 69; Fig 22; 293pp; English.  
XX The invention relates to novel human angiogenesis-associated proteins  
CC designated PRO proteins (AAB53064-B53097), and to nucleic acids encoding  
CC PRO proteins. The invention also relates to vectors and host cells  
CC comprising a PRO nucleic acid, the recombinant production of a PRO  
CC protein, PRO antibodies specific for a PRO protein, fusion proteins  
CC comprising a PRO protein, agonists or antagonists of a PRO protein, and  
CC compounds which inhibit the expression of a PRO gene. The invention  
CC additionally encompasses methods of identifying modulators of PRO

expression or activity; diagnosing a cardiovascular, endothelial or angiotensin disorder, or a susceptibility to such a disorder by detecting mutations in a PRO gene, or the expression level of a PRO gene within a particular tissue; treating a cardiovascular, endothelial or angiotensin disorder via the administration of a PRO protein, PRO nucleic acid, or PRO agonist or antagonist; a retroviral gene therapy vector comprising a PRO nucleic acid; and methods of inhibiting or stimulating endothelial cell growth, cardiac hypertrophy or PRO-induced angiogenesis via the administration of a PRO protein, or an agonist or antagonist thereof. PRO nucleic acids, PRO proteins, antibodies against PRO proteins, PRO agonists and PRO antagonists may be used as therapeutic agents to treat cardiovascular, endothelial or angiotensin disorders, such as atherosclerosis, osteoporosis, myocardial infarction, hypertension, diabetic retinopathy, rheumatoid arthritis, Crohn's disease, psoriasis, endometriosis, ulcers, wounds, cancer, Alzheimer's disease, Huntington's disease, or stroke. PRO nucleic acids are additionally useful in the recombinant production of PRO proteins, as hybridization probes to screen libraries to isolate cDNAs with sequence identity to PRO proteins, to map genes encoding PRO proteins, to analyse genetic disorders, and in gene therapy. PRO nucleic acids can also be used to produce transgenic animals useful for the development and screening of potential therapeutic agents. The present sequence represents a PRO protein of the invention.

XX  
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 22; Length 345;  
Best Local Similarity 100.0%; Pred. No. 4.7e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LDLEDLYRPTWLLGKAFVGRKSRVVDNLNLTVEVRLYSCTPRNFVSIRLEELKRTDTI 60  
Db 210 LDLEDLYRPTWLLGKAFVGRKSRVVDNLNLTVEVRLYSCTPRNFVSIRLEELKRTDTI 269

Qy 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKKYHEVLQIRPKTGVRGLHKSITDVAL 120  
Db 270 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKKYHEVLQIRPKTGVRGLHKSITDVAL 329

Qy 121 EHHEECDCVCRGSTGG 136  
Db 330 ehheecdcvcrgstgg 345

RESULT 27  
AAB10639  
ID AAB10639 standard; Protein; 374 AA.

XX  
AC AAB10639;

XX  
DT 19-JAN-2001 (first entry)

XX  
DE Human VEGF-X protein for expression in mammalian systems.

XX VEGF-X; vascular endothelial growth factor; human; vulnarary; cytostatic;  
KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;  
KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
KW venous sore; diabetic ulcer; burns; skin graft growth.

XX  
OS Homo sapiens.

XX  
PN W0200037641-A2.

XX  
PD 29-JUN-2000.

XX  
PF 21-DEC-1999; 99WO-0630503.

XX  
PR 22-DEC-1998; 98GB-0028377.

XX  
PR 18-MAR-1999; 99US-0124967.

XX  
PR 08-NOV-1999; 99US-0164131.

XX  
XX \*

PA (JANC ) JANSSEN PHARM NV.

XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;

PI Dhanaraj SN, Xu J;

XX WPI; 2000-442669/38.

DR N-PSDB; AAA71983.

XX New vascular endothelial growth factor protein, useful for treating or preventing diseases associated with inappropriate angiogenesis activity such as cancer, rheumatoid arthritis, psoriasis and wounds -

PS Disclosure; Fig 19; 127pp; English.

XX This invention describes a novel vascular endothelial growth factor-X (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has vulnarary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and antidiabetic activity and acts as an angiogenesis and vascularization regulator. An antisense molecule of the invention is useful for treating or preventing cancer, rheumatoid arthritis, psoriasis and diabetic retinopathy by inhibiting angiogenic activity or inappropriate vascularization including formation and proliferation of new blood vessels, growth and development of tissues, tissue regeneration and organ and tissue repair in a subject. The products of the invention are useful for preparing medicaments for treating wounds such as dermal ulcers, pressure sores, venous sores, diabetic ulcers and burns and to promote skin graft growth, tissue repair, proliferation of new blood vessels, tissue regeneration and organ repair by promoting angiogenic activity or vascularization. This sequence represents a human VEGF-X protein which can be expressed in mammalian systems and which is described in the method of the invention.

XX  
SQ Sequence 374 AA;

Query Match 100.0%; Score 754; DB 21; Length 374;  
Best Local Similarity 100.0%; Pred. No. 5.1e-71;  
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 LDLEDLYRPTWLLGKAFVGRKSRVVDNLNLTVEVRLYSCTPRNFVSIRLEELKRTDTI 60  
Db 210 LDLEDLYRPTWLLGKAFVGRKSRVVDNLNLTVEVRLYSCTPRNFVSIRLEELKRTDTI 269

Qy 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKKYHEVLQIRPKTGVRGLHKSITDVAL 120  
Db 270 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKKYHEVLQIRPKTGVRGLHKSITDVAL 329

Qy 121 EHHEECDCVCRGSTGG 136  
Db 330 ehheecdcvcrgstgg 345

RESULT 28  
AAB10640  
ID AAB10640 standard; Protein; 354 AA.

XX  
AC AAB10640;

XX  
DT 19-JAN-2001 (first entry)

XX Human VEGF-X protein for expression in Baculovirus/insect cell systems.

XX VEGF-X; vascular endothelial growth factor; human; vulnarary; cytostatic;  
KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;  
KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
KW venous sore; diabetic ulcer; burns; skin graft growth.

XX  
OS Homo sapiens.

XX  
PN W0200037641-A2.

XX

PD 29-JUN-2000.  
 XX PF 21-DEC-1999; 99WO-US30503.  
 XX PR 22-DEC-1998; 98GB-0028377.  
 PR 18-MAR-1999; 99US-0124967.  
 PR 08-NOV-1999; 99US-0164131.  
 XX (JANC ) JANSSEN PHARM NV.  
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;  
 PI Dhanaraj SN, Xu J;  
 XX WPI; 2000-442669/38.  
 DR N-PSDB; AAA71984.  
 XX New vascular endothelial growth factor protein, useful for treating or  
 PT preventing diseases associated with inappropriate angiogenesis activity  
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -  
 XX Disclosure; Fig 20; 127pp; English.  
 XX This invention describes a novel vascular endothelial growth factor-X  
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
 CC vulnary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and  
 CC antidiabetic activity and acts as an angiogenesis and vascularization  
 CC regulator. An antisense molecule of the invention is useful for treating  
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
 CC retinopathy by inhibiting angiogenic activity or inappropriate  
 CC vascularization including formation and proliferation of new blood  
 CC vessels, growth and development of tissues, tissue regeneration and organ  
 CC and tissue repair in a subject. The products of the invention are useful  
 CC for preparing medicaments for treating wounds such as dermal ulcers,  
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote  
 CC skin graft growth, tissue repair, proliferation of new blood vessels,  
 CC tissue regeneration and organ repair by promoting angiogenic activity or  
 CC vascularization. This sequence represents a human VEGF-X protein which  
 CC can be expressed in Baculovirus/Insect cell systems and which is  
 CC described in the method of the invention.  
 XX Sequence 354 AA;  
 SQ  
 Query Match 98.7%; Score 744; DB 21; Length 354;  
 Best Local Similarity 99.3%; Pred. No. 5.4e-70;  
 Matches 135; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 LDLEDYRPTWLLGKAFVGRKSRVVDNLNLTTEEVRYSCTPRNFSVSIREELKRTDTI 60  
 Db 219 ldledlyrptwllgkafvgrksrvvvdnlntteevrlyscprnfsvsireelkrttdti 278  
 Qy 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTGVRGLHKSITDVAL 120  
 Db 279 fwpqcllvkrcggncacclhncnecqvpstkkyhevlqlrpkgtvrglhksltdval 338  
 Qy 121 EHHECDVCVCGSTGG 136  
 Db 339 ehheesdcvcrgstgg 354  
 RESULT 29  
 AAB10641  
 ID AAB10641 standard; Protein; 354 AA.  
 XX AAB10641;  
 XX  
 DT 19-JAN-2001 (first entry)  
 XX Human VEGF-X protein for expression in E. coli systems.  
 DE VEGF-X; vascular endothelial growth factor; human; vulnary; cytostatic;  
 XX antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;  
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;  
 KW

KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;  
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;  
 KW venous sore; diabetic ulcer; burns; skin graft growth.  
 OS Homo sapiens.  
 XX WO200037641-A2.  
 PN 29-JUN-2000.  
 PD 21-DEC-1999; 99WO-US30503.  
 XX 22-DEC-1998; 98GB-0028377.  
 PR 18-MAR-1999; 99US-0124967.  
 PR 08-NOV-1999; 99US-0164131.  
 XX (JANC ) JANSSEN PHARM NV.  
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;  
 PI Dhanaraj SN, Xu J;  
 XX WPI; 2000-442669/38.  
 DR N-PSDB; AAA71985.  
 XX New vascular endothelial growth factor protein, useful for treating or  
 PT preventing diseases associated with inappropriate angiogenesis activity  
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -  
 XX Disclosure; Fig 21; 127pp; English.  
 XX This invention describes a novel vascular endothelial growth factor-X  
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has  
 CC vulnary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and  
 CC antidiabetic activity and acts as an angiogenesis and vascularization  
 CC regulator. An antisense molecule of the invention is useful for treating  
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic  
 CC retinopathy by inhibiting angiogenic activity or inappropriate  
 CC vascularization including formation and proliferation of new blood  
 CC vessels, growth and development of tissues, tissue regeneration and organ  
 CC and tissue repair in a subject. The products of the invention are useful  
 CC for preparing medicaments for treating wounds such as dermal ulcers,  
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote  
 CC skin graft growth, tissue repair, proliferation of new blood vessels,  
 CC tissue regeneration and organ repair by promoting angiogenic activity or  
 CC vascularization. This sequence represents a human VEGF-X protein which  
 CC can be expressed in E. coli systems and which is described in the method  
 CC of the invention.  
 XX Sequence 354 AA;  
 SQ  
 Query Match 98.7%; Score 744; DB 21; Length 354;  
 Best Local Similarity 99.3%; Pred. No. 5.4e-70;  
 Matches 135; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
 Qy 1 LDLEDYRPTWLLGKAFVGRKSRVVDNLNLTTEEVRYSCTPRNFSVSIREELKRTDTI 60  
 Db 219 ldledlyrptwllgkafvgrksrvvvdnlntteevrlyscprnfsvsireelkrttdti 278  
 Qy 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKKYHEVLQLRPKTGVRGLHKSITDVAL 120  
 Db 279 fwpqcllvkrcggncacclhncnecqvpstkkyhevlqlrpkgtvrglhksltdval 338  
 Qy 121 EHHECDVCVCGSTGG 136  
 Db 339 ehheesdcvcrgstgg 354  
 RESULT 30  
 AAB48658  
 ID AAB48658 standard; Protein; 345 AA.  
 XX AAB48658;  
 AC



CC maintenance, as well as tissue maintenance and repair processes. ZVEGF3  
CC antagonists are useful for treating cancer, rheumatoid arthritis,  
CC diabetic retinopathy, ischemic limb disease, peripheral vascular  
CC disease, myocardial ischemia, vascular intimal hyperplasia,  
CC atherosclerosis, wound healing, chronic liver disease and haemangioma  
CC formation. ZVEGF3 can also be used to modulate neurite growth and  
CC development of the nervous system, and for treating neurodegenerative  
CC diseases.  
XX  
SQ Sequence 345 AA;

Query Match 92.4%; Score 697; DB 21; Length 345;  
Best Local Similarity 89.0%; Pred. No. 4.4e-65;  
Matches 121; Conservative 11; Mismatches 4; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLLGKAFVFGKRSRVVDLNLTEEVRLYSCTPRNFSVIREELKRTDTI 60  
Db :||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
210 vldlslykptqllgkaflygkkskvnlnllkeevklyscprnfsvireelkrttdti 269

QY 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKYHEVLQRLPKTGVRGLHKS LTDVAL 120  
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
270 fwpgcilvkrcggncacclhncnecqcvprkvtkkyhevlqrlpkgtgkglhksltdval 329

QY 121 EHHEECDCVCRGTGG 136  
Db |||||:|||||: ||

330 ehheecdvcgrnagg 345

RESULT 32  
ID AAY84559 standard; Protein: 345 AA.  
XX  
AC AAY84559;  
XX  
DT 25-JUL-2000 (first entry)  
XX  
DE A murine platelet-derived growth factor C (PDGF-C).  
XX  
KW Platelet-derived growth factor C; PDGF-C; cell proliferation;  
KW growth factor; heparin; connective tissue; wound healing; VEGF-F;  
KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;  
KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;  
KW lung carcinoma; erythroleukemia; tissue remodelling.  
XX  
OS Mus sp.  
XX  
PN W0200018212-A2.  
XX  
PD 06-APR-2000.  
XX  
PF 30-SEP-1999; 99WO-US22668.  
XX  
PR 30-SEP-1998; 98US-0102461.  
PR 12-NOV-1998; 98US-0108109.  
PR 03-DEC-1998; 98US-0110749.  
PR 18-DEC-1998; 98US-0113002.  
PR 21-MAY-1999; 98US-0135426.  
PR 15-JUL-1999; 99US-0144022.  
XX  
(LUDW-) LUDWIG INST CANCER RES.  
PA (UYHE-) UNIV HELSINKI LICENSING LTD.  
XX  
PI Eriksson U, Aase K, Lee X, Ponten A, Uutela M, Alitalo K;  
PI Oestman A, Heldin C, Betsholtz C;  
XX  
WPI: 2000-292954/25.  
DR N-PSDB: AAA12525.  
XX  
Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,  
PT differentiation, growth and motility of cells expressing the PDGF-C  
PT receptor  
PT

PS Claim 27; Fig 6; 135pp; English.  
XX  
CC The present sequence represents murine platelet-derived growth factor C  
CC (PDGF-C) (formally designated VEGF-F). PDGF-C polypeptides have the  
CC ability to stimulate and enhance proliferation or differentiation,  
CC and/or growth or motility of cells expressing a PDGF-C receptor.  
CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell  
CC proliferation, preferably in combination with one other growth factor  
CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also  
CC be used for stimulating connective tissue or wound healing. The  
CC PDGF-C polypeptide can be enzymatically processed to generate the active  
CC truncated form of PDGF-C and used to regulate the receptor-binding  
CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast  
CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.  
CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour  
CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.  
CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma  
CC and erythroleukemia, can be identified by testing for expression of  
CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue  
CC remodelling during invasion of tumour cells into a normal population of  
CC cells. Antagonists can also be used to treat fibrotic conditions,  
CC especially found in the lung, kidney or liver.  
XX  
SQ Sequence 345 AA;

Query Match 92.4%; Score 697; DB 21; Length 345;  
Best Local Similarity 89.0%; Pred. No. 4.4e-65;  
Matches 121; Conservative 11; Mismatches 4; Indels 0; Gaps 0;

QY 1 LDLEDLYRPTWQLLGKAFVFGKRSRVVDLNLTEEVRLYSCTPRNFSVIREELKRTDTI 60  
Db :||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
210 vldlslykptqllgkaflygkkskvnlnllkeevklyscprnfsvireelkrttdti 269

QY 61 FWPGLLVKRCGGNCACCLHNCNECQVPSKVTKYHEVLQRLPKTGVRGLHKS LTDVAL 120  
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||  
270 fwpgcilvkrcggncacclhncnecqcvprkvtkkyhevlqrlpkgtgkglhksltdval 329

QY 121 EHHEECDCVCRGTGG 136  
Db |||||:|||||: ||

330 ehheecdvcgrnagg 345

Search completed: August 29, 2001, 09:46:55  
Job time: 31 sec

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